CITY OF MANCHESTER.

REPORT

ON THE

Health of the City of Manchester,

1925,

BY

R. VEITCH CLARK, M.A., M.B., Ch.B., B.Sc.

MANCHESTER:
Henry Blacklock & Co. Limited, Albert Square.

(2784)

Public Health Office,
Civic Buildings,
1, Mount Street, Manchester,
September, 1926.

My Lord Mayor, Aldermen,
and Members of the City Council.

I beg to submit my report on the health of the City of Manchester for the year 1925.

Death of Dr. Niven.

It is fitting that reference should be made through the medium of the health report of the City of Manchester to the death of Dr. James Niven, which occurred on September the 30th, 1925, inasmuch as Dr. Niven for many years sustained so ably the reputation of the City of Manchester in the public health world. Dr. Niven's death was very sincerely mourned, the staff of the department feeling they had lost a sincere friend as well as a revered leader. Dr. Niven's funeral was attended by a very full representation both of the Public Health Committee and of the staff.

The numerous obituary notices in the general and the medical press testified to the high esteem in which Dr. Niven was held as a man and as one of the outstanding figures of his time in preventive medicine.

Survey Report.

The report for the year 1925 constitutes the first of the survey reports asked for under the new arrangements instituted by the Ministry of Health a few years ago. This report is meant to deal specifically with the five years ending with the year 1925, and throughout the report it will be found that the returns are given in such a manner as to show the position in each of these five years, and in many instances over much longer periods continuously. In this introductory letter it is not proposed to analyse specially any of these returns. References are given to special work, so that detailed information may readily be turned up in the body of the report, and a complete index has been prepared, so that by reference either to the introduction or to the index the necessary information can readily be obtained.

Statistics.

With reference to the statistical returns for the City it is to be noted that an Order altering the registration districts from the old sanitary districts to districts made up of the grouping of municipal wards came into force in September, 1924, and the returns for the year 1925 in consequence refer throughout to the new districts. These new districts do not correspond, excepting in some cases, to the old sanitary districts, and exact comparisons are therefore not possible with past years in those tables dealing with individual areas in the City.

Birth Rate.

The birth rate for 1925 was 18·6. The decline from the relatively high birth rate of 24·3 in 1920 has continued. The low birth rates for the years immediately preceding 1920 are of course abnormal, inasmuch as the absence of the male population in the war inevitably lowered the birth rate for these war years.

Death Rate.

The death rate of 14·40 per thousand is a slight increase over the years immediately preceding. The year 1925, compared with the immediately preceding ten years' averages, shows an increased mortality in several disease groups, more particularly in the following :—Diseases of the heart and blood vessels, 0·46 per 1,000 ; bronchitis, 0·26 per 1,000 ; and cancer, 0·21 per 1,000 of the population. Against these, which are the principal losses, we have to offset certain gains, of which the following are the most marked :— Influenza, 0·31 per thousand ; measles, 0·12 per thousand ; and tubercular diseases (other than pulmonary), 0·12 per thousand. A fuller statement of the losses and gains is to be found on page 3.

Infant Mortality.

The infant mortality rate was 95·77, which is, with the exception of the year 1923 (88·19), the lowest yet recorded. The principal gains as compared with 1924 were in measles, pneumonia, and atrophy, whilst there were increases in deaths from whooping cough and diarrhœa.

Infectious Diseases.

There is nothing of special note in the incidence of infectious diseases during the year 1925 excepting that the total number of diphtheria cases was over the average. It is satisfactory to note that although there is this increase in the number of cases during the twelve months the case mortality from the disease continues to decline.

Smallpox.

There was no smallpox in the City during 1925.

Encephalitis Lethargica (Sleepy Sickness).

Eighty-two cases of encephalitis lethargica occurred in the City during 1925, with 24 deaths, as against 244 cases and 52 deaths in 1924.

Puerperal Fever.

The incidence of puerperal fever does not show the diminution which is to be desired. Thus there were 179 cases notified during 1925, as against an average of 113 for the preceding ten years' period. Special attention is directed to the report on the treatment of puerperal fever in Monsall Hospital given on pages 120–126.

Cancer.

An appeal for £20,000 was made by the Manchester Committee on Cancer at the end of 1925, and a sum of approximately £12,000 was received in response. The Committee felt justified in proceeding with the work which it had outlined for itself, and it appears advisable at this time to publish the progress report (see pages 232–235), which gives the position reached by the Committee in July, 1926.

Smoke.

With reference to the general smoke nuisance and the very serious injury done to the public health by this preventible condition, it need only be noted that with the occurrence of typical fogs in the month of November there was a sharp rise in the respiratory deaths. A special report on pages 236–241 shows the present position with regard to the work of the Regional Joint Smoke Abatement Committee.

Reorganisation of the Work of the Sanitary Inspectorate and Disinfection.

During the year a reorganisation of the work of the Sanitary Inspectors was recommended to the Public Health Committee, and the Committee approved the proposed scheme. Incorporated with this scheme was a rearrangement of the modes of disinfection after infectious disease in the City.

The reports dealing with this matter are shown on pages 227–231. The reorganisation was put into operation at the end of 1925, and a reference will be made as to its working efficiency in the annual report for 1926.

Abergele Sanatorium.

Towards the end of 1925 the first stages of the operations for the provision of the new sanatorium for children at Abergele were commenced. A contract for the construction of the bridge over the gully was accepted, and the work was commenced in November, 1925. A beginning has also been made with the construction of the roads on the actual site.

The officers in charge of the different sections of the department have written the reports on the work of their sections, and I gratefully acknowledge the unstinted help which I have throughout received from the members of the staff, both in the general work of the department and in the preparation of the report now submitted.

May I also, My Lord Mayor, be permitted to express my appreciation of the courtesy and unfailing aid which I have experienced, not only from the Public Health Committee, but from the members of the City Council.

I have the honour to be,

Your obedient Servant,

R. Veitch Clark,
Medical Officer of Health.

STATISTICAL.

The following are general statistics for the year 1925 :—

Area of the City in acres			21,690
Population at the Census, 1921			730,307
,, ,, ,, ,, Adjusted by Registrar-General for Holiday Movement			744,000
Estimated population at the middle of year	Males	358,044	758,235
	Females	400,191	
No. of persons per acre			35
Persons married per 1,000 of population in the Manchester Union			16·98
Births in the City of Manchester	Males	7,245	14,127
	Females	6,882	
Annual birth-rate per 1,000 of population			18·63
Deaths	Males	5,719	10,916
	Females	5,197	
Recorded annual death-rate per 1,000 of population	Males	15·97	14·40
	Females	12·99	
Deaths under 1 year of age per 1,000 births			95·77
Excess of registered births over deaths			3,211
Percentage of mortality occurring in public institutions			39·82
No. of undivided private houses at the Census in June, 1921			143,725
,, ,, ,, ,, tenements, blocks of flats, shops, etc., at the Census in June, 1921.			157,704
No. of persons per undivided private house			4·56
,, ,, all dwellings			4·63
Corresponding figures, 1911, ordinary dwelling-houses			4·71
,, ,, ,, all dwellings			4·86

The extent to which Institutions are used is to some extent represented in the following table :—

TABLE 4.

DEATH-RATES IN THE HOMES OF THE PEOPLE AND IN INSTITUTIONS FOR 5 YEARS 1921–1925.

YEAR	Estimated Populations to middle of Year	Death-rate per 1000 of persons dying in their own homes	Death-rate per 1000 of persons dying in Institutions	Total death-rate per 1000
1921	744,000	8·63	4·94	13·57
1922	746,986	9·12	5·14	14·26
1923	752,100	8·42	4·90	13·32
1924	755,119	8·70	5·25	13·95
1925	758,235	8·67	5·73	14·40

The chief causes of death are shown below for each of the years 1920–1925 :—

TABLE 5.

	1920	1921	1922	1923	1924	1925
Tuberculosis of the Lungs	868	967	947	931	906	997
Tuberculosis of Organs other than the Lungs	220	252	242	221	229	184
Diseases of the Heart	1076	1052	1087	1085	1123	1133
Cerebral Hæmorrhage, Apoplexy, Hemiplegia..............	462	422	439	458	473	498
Pneumonia	919	924	1024	974	1023	961
Bronchitis	1193	1067	1277	1091	1234	1371
Digestive Organs	373	382	310	391	339	364
Atrophy, Debility (chiefly in infants)	245	140	114	86	105	69
Old Age	408	405	467	421	353	459
Premature Birth.....................	378	333	310	277	299	281
Nephritis and Bright's Disease	283	260	289	243	273	243
Convulsions............................	61	82	53	63	81	69
Inflammation of the Brain	65	59	51	52	43	39
Diarrhœa and Dysentery.........	250	387	191	202	212	230
Measles	210	5	354	83	370	129
Scarlet Fever	46	59	62	31	32	56
Whooping Cough	84	169	99	184	116	206
Diphtheria	67	90	82	47	62	102
Influenza..............	229	207	393	281	342	262
Malignant Disease..................	936	939	955	1049	1050	1055

City of Manchester (299, Oldham Road)—Meteorology, 1925. (Means of the Monthly Readings.)

	Barometer	Dry Bulb	Wet Bulb	Humidity	Maximum Temperature	Minimum Temperature	Mean Temperature in Shade	Sun Maximum	Grass Minimum	One Foot	Four Feet	Total Rainfall (inches)	Total No. of Wet Days	Total Hours of Sunshine	Average Mean Daily Temperature 1881-1915 (extracted from book of normals)	Average Rainfall 1892-1925	Average Hours of Sunshine 1892-1925	Fog Noted
January	30·160	41·7	39·8	86	46·3	38·2	42·0	55·6	35·9	39·9	44·9	2·32	18	11·5	39·1	2·83	10·74	16th
February	29·605	41·2	39·3	85	45·4	36·4	40·9	59·6	34·9	39·5	43·4	5·54	22	21·5	40·1	2·42	30·43	16th, 20th, 21st, 22nd
March	30·223	41·7	39·3	82	46·3	36·9	41·5	69·9	35·1	39·6	42·5	1·52	18	71·1	42·3	2·44	73·89	18th, 29th
April	29·857	46·3	42·6	75	52·7	39·9	46·3	87·2	37·6	44·3	44·6	2·17	15	126·5	46·8	2·00	116·74	
May	30·403	53·9	49·6	74	60·9	48·3	54·6	97·5	45·5	50·9	48·3	4·22	25	109·9	52·6	2·34	145·26	
June	30·225	61·3	54·7	66	70·0	52·2	61·1	110·8	48·6	60·6	55·2	0·06	4	218·3	58·4	2·24	151·60	
July	29·940	63·4	57·9	71	71·5	56·7	64·1	107·9	49·3	65·1	60·4	2·27	11	147·1	60·8	2·93	141·18	
August	29·975	60·8	56·6	76	67·2	55·6	61·4	100·1	51·1	61·5	60·9	3·28	16	99·7	59·9	3·49	116·66	
September	29·938	53·4	49·9	79	58·7	47·8	53·2	91·0	43·4	54·8	57·9	4·46	23	96·2	56·4	2·53	99·09	30th
October	30·259	50·8	48·8	87	55·9	46·0	50·9	71·3	44·4	50·5	53·5	4·70	18	32·7	49·8	3·27	55·24	5th, 9th, 10th
November	29·987	37·9	36·3	85	43·7	35·9	39·8	56·8	32·0	40·3	48·9	2·28	11	28·9	43·6	2·65	17·72	9th, 10th, 12th, 13th, 14th, 19th, 20th, 21st, 22nd, 24th, 26th
December	29·739	37·2	35·8	86	42·9	35·7	39·3	47·1	31·9	34·8	41·9	2·52	22	5·7	40·4	3·60	6·51	3rd, 4th, 23rd
YEAR	30·026	49·1	45·9	78	55·1	44·1	49·6	79·6	40·8	48·5	50·2	35·34	203	969·1	49·2	32·74	965·06	

The following figures show the gains and losses in the death-rates in 1925 over the average of the previous ten years :—

TABLE 6.

Gains and Losses in 1925 *per* 1,000 *persons living, as compared with the average for the* 10 *years* 1915-1924—(See Table K).

Gains.

Measles	0·12
Enteric Fever	0·01
Puerperal Fever	0·01
Influenza	0·31
Diarrhœal Diseases	0·05
Pyæmia and Septicæmia	0·01
Phthisis	0·06
Tubercular Diseases (other)	0·12
Alcoholism	0·01
Nervous Diseases	0·06
Premature Birth	0·04
Pneumonia	0·07
Digestive System	0·03
Urinary Organs (Diseases of)	0·04
Total	0·94

Losses.

Scarlet Fever	0·02
Whooping Cough	0·08
Erysipelas	0·02
Diphtheria	0·04
Cancer	0·21
Rheumatic Fever	0·01
Diseases of the Heart and Blood Vessels	0·46
Bronchitis	0·26
Respiratory Diseases (other)	0·01
Old Age	0·04
Total	1·15

Balance of Loss from above Causes	0·21
„ „ „ all Causes	0·21

INFANTILE MORTALITY

The figures relating to infantile mortality, divided into those concerning the first and second trimesters and the last six months of the first year, are shown in Table 7.

TABLE 7.—INFANTILE MORTALITY.

Deaths per 1,000 *births at the ages* 0–2 *months,* 3–5 *months, and* 6–11 *months, in successive years.*

YEARS	Months of Age			
	0–2	3–5	6–11	Under 1 year
1891–1895 (mean) ..	82·79	40·99	62·97	186·75
1896–1900 (mean) ..	83·44	42·43	66·28	192·16
1901–1905 (mean) ..	81·02	37·52	54·24	172·78
1906–1910 (mean) ..	73·89	29·12	44·27	147·28
1911–1915 (mean) ..	69·23	24·38	39·26	132·88
1916–1920 (mean) ..	58·46	17·72	28·65	104·82
1921–1925 (mean) ..	52·46	15·63	27·38	95·45
1921	54·54	18·81	23·64	96·98
1922	53·61	15·07	27·50	96·18
1923	49·34	12·09	26·77	88·19
1924	53·03	16·07	31·04	100·13
1925	51·77	16·13	27·97	95·77

Table 8 allows a comparison with former years in respect of the infantile mortality rates from different causes for the whole of the first year of life.

TABLE 8.

CITY OF MANCHESTER.

CAUSES OF DEATH	DEATHS UNDER ONE YEAR PER 1,000 BIRTHS					
	1920	1921	1922	1923	1924	1925
All causes	97·08	96·98	96·18	88·19	100·13	95·77
Smallpox	..	..	..	..	..	..
Chickenpox	..	0·11	0·19	..	..	0·14
Measles	2·77	0·11	5·68	0·91	4·77	1·91
Scarlet Fever	0·16	0·11	0·19	0·13	0·07	0·07
Whooping Cough	1·99	5·23	2·14	4·81	2·52	5·95
Diphtheria	0·10	0·17	0·76	0·19	0·34	0·64
Erysipelas	0·10	0·11	..	0·13	0·20	0·50
Tuberculous Meningitis	0·42	0·62	1·26	1·17	0·82	0·57
Abdominal Tuberculosis	0·37	0·17	0·44	0·39	0·20	0·28
Other Tuberculous Diseases	0·57	0·57	0·38	0·32	0·82	0·50
Meningitis (*not Tuberculous*)	1·31	0·68	1·07	0·91	0·95	0·64
Convulsions	2·82	3·81	2·84	3·38	4·29	4·39
Laryngitis	0·10	0·11	0·13	..	0·14	..
Bronchitis	11·08	9·15	9·65	7·27	9·19	9·20
Pneumonia (all forms)	11·81	10·57	15·26	17·30	16·68	13·94
Diarrhœa and Enteritis	11·13	17·95	9·78	9·81	11·10	12·88
Gastritis	1·25	1·14	0·57	0·84	1·09	0·99
Syphilis	1·99	1·82	1·96	0·84	1·50	0·71
Rickets	0·37	0·23	0·19	0·32	0·20	0·35
Injury at Birth	1·36	1·48	1·07	1·23	2·38	2·19
Atelectasis	2·61	3·70	3·34	2·99	1·36	1·27
Congenital Malformation	4·28	4·04	4·42	4·03	5·65	6·02
Premature Birth	19·70	18·86	19·55	18·00	20·35	19·89
Atrophy, Debility, and Marasmus	12·17	7·61	6·94	5·20	6·74	4·88
Overlying, found dead in bed, and suffocation	1·98	1·64	1·70	0·78	1·43	0·57
Other causes	7·21	7·44	7·13	7·51	7·34	7·29

Herewith are given the tables of poor law relief, already mentioned :—

AMOUNT OF POOR LAW RELIEF.

This is shown in the table on page 8, compiled from a monthly statement furnished to the Hospitals Sub-Committee. Further particulars are given in the statement below, obtained from the Clerk to the Manchester Guardians.

Manchester Union.

Return relating to Sick Persons and Persons Suffering from Mental Infirmity Maintained by, or Chargeable to, the Guardians of the Poor of the Manchester Union on the 1st January, 1926.

Institution	Class of Case Maintained	Sick	Suffering from Mental Infirmity
1. *Poor Law Establishments.*			
(*a*) *Belonging to Manchester Union* :—			
Crumpsall Infirmary (2,500).	General Hospital and Lunacy	1,512	505
Withington Hospital (1,620).	General Hospital.. ..	1,175	—
Rose Hill Convalescent Home (103)	Convalescent children .	86	—
Booth Hall Infirmary (500).	General Hospital for Children	533	—
Langho Colony (594)	Epileptic persons ..	—	594
(*b*) *Belonging to other Unions* :—			
Garstang	Feeble-minded persons.	—	4
Ulverston Union	,, ,, .	—	12
Lunesdale	,, ,, .	—	11
West Derby	Mentally deficient persons	—	3
Metropolitan Asylums Board (Whiteoak School)	Ophthalmic children ..	2	—
2. *Non-Poor Law Establishments.*			
(*a*) *County Mental Hospitals* :—			
Lancaster	Lunatics	—	372
Prestwich	,, ...	—	864
Winwick..	,, ...	—	479
Whittingham..	,, ...	—	147
Rainhill	,, ...	—	28
Colney Hatch	,, ...	—	1
Leicester City	,, ...	—	1
Glamorgan	,, ...	—	1
(*b*) *Hospitals, Homes, and Schools* :—			
St. John Baptist's Ophthalmia School, Chigwell	Ophthalmic boys.. ..	3	—
Ormerod Home, St. Annes-on-Sea	Delicate and Phthisical children	5	—
Pen-y-coed, Abergele	Phthisical children ..	10	—
St. Anne's Ophthalmia School, London	Ophthalmic persons ..	7	—
	Carried forward	3,333	3,022

Institution	Class of Case Maintained	Sick	Suffering from Mental Infirmity
	Brought forward ..	3,333	3,022
Non-Poor Law Establishments (continued)— (*b*) *Hospitals, Homes, and Schools*—(continued)			
Monsall Fever Hospital, Newton Heath	Infectious	7	—
Dr. Garrett Memorial Home, Conway	Phthisical children ..	145	—
Royal Alexandra Hospital, Rhyl	Convalescent	5	—
St. Agnes Training School, Leyton	Feeble-minded women.	—	1
Sandlebridge School, Alderley Edge	Mentally defective adults	—	8
All Souls' Special School, Hillingdon, Essex	Feeble-minded girls	—	5
Cumnor Rise Home, Botley, Oxford		—	3
Stoke Park Colony, Bristol.	Feeble-minded persons	—	34
Whittington Hall, Chesterfield		—	10
Pontville Home, Ormskirk..	Feeble-minded boys ..	—	3
Durran Hill House, Carlisle.	Mentally defective women	—	12
St. Joseph's Home, Sudbury	Feeble-minded young women	—	2
Allerton Priory, Woolton, Lancs.	Feeble-minded children	—	3
Royal Albert Institution, Lancaster	Feeble-minded adults..	—	10
David Lewis Epileptic Colony, Alderley Edge	Epileptics	—	2
Starnthwaite Colony, Starnthwaite	,, ...	—	1
Home for Aged Needy and Incurable Jews	Incurable Jews	2	—
Eastby Sanatorium, Skipton, Yorkshire	Phthisical boys	30	—
Banksea Convalescent Home, Dovercourt	Convalescent	1	—
Home for Incurables, Liverpool	Incurables	1	—
St. Francis Roman Catholic Special School, Hillside House, Buntingford	Feeble-minded children	—	1
North of England Children's Sanatorium, Hawkeshead Street, Southport	Convalescent	1	—
Seabright House, South Drive, St. Annes-on-Sea	Convalescent	4	—
	Total	3,528	3,117
Central Hall Maternity Homes	Maternity cases	3	—
Macalpine	,, ,, ...	1	—
Crossley	,, ,, ...	1	—

N.B.—The figures shown in brackets against the Institutions under heading 1 (*a*) represent the accommodation for the class referred to.

The Number of Persons who were in Receipt of Relief from the Manchester Board of Guardians during the Last Week in each Month of the Years 1925 and 1924.

	1925			1924		
	Indoor	Out-Door	Sick Remaining	Indoor	Out-Door	Sick Remaining
January ..	7,455	20,063	2,633	7,497	27,114	2,662
February ..	7,432	20,370	2,633	7,473	23,633	2,591
March ..	7,258	20,231	2,577	7,503	22,836	2,706
April	7,158	20,761	2,363	7,331	22,195	2,667
May	6,996	19,937	2,443	7,063	21,040	2,593
June	6,892	20,552	2,441	6,956	21,659	2,498
July	6,988	20,860	2,487	6,885	20,708	2,416
August ..	6,893	22,211	2,316	6,883	20,661	2,369
September..	7,037	23,145	2,467	6,884	18,916	2,363
October ..	7,186	23,820	2,580	6,931	18,588	2,308
November .	7,345	24,680	2,579	7,144	18,809	2,381
December ..	7,357	25,723	2,520	7,137	18,726	2,348

TABLES.

1925.

TABLE A.—MANCHESTER, 1925.

CAUSES OF DEATH AT DIFFERENT LIFE PERIODS IN THE 52 WEEKS OF THE YEAR

PERSONS.—(MALES AND FEMALES.)

CAUSES OF DEATH	AGES AT DEATH													
	All Ages	Under 5 Years 0 to 1	Under 5 Years 1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
All Causes	10916	1353	802	198	130	259	243	534	790	1381	1769	1988	1248	221
A.—GENERAL DISEASES........	4163	799	456	110	62	161	133	282	343	585	607	446	158	21
B.—LOCAL DISEASES............	5846	472	310	74	58	77	88	215	400	732	1088	1383	823	126
C.—OTHER SPECIFIED DIS:..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
D.—ILL-DEFINED DISEASES...	544	69	2	...	1	...	...	1	2	6	20	122	250	71
E.—VIOLENT DEATHS	363	13	34	14	9	21	22	36	45	58	54	37	17	3
A.—General Diseases.														
Smallpox.. Vaccinated	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox.. Not Vaccinated ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox.. No Statement......	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cowpox .... ·· ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chickenpox	3	2	...	1	...	...	...	...	...	...	...	...	...	...
Measles	129	27	96	6	...	...	...	...	...	...	...	...	...	..
Epidemic Rose Rash	5	1	3	...	1	...	...	...	...	...	...	...	...	...
Scarlet Fever..	56	1	35	13	3	1	1	1	1	...	...	...	...	...
Typhus	...	...	...	...	...	...	...	...	...	..	...	...	...	...
Plague.................................	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	262	8	9	2	3	9	5	24	26	40	51	55	26	4
Whooping Cough	205	84	115	6	...	...	...	...	...	...	1	...	...	...
Mumps	3	1	1	...	...	...	...	...	...	1	...	...	...	...
Diphtheria...	102	9	54	32	3	2	1	...	1	...	...	...	...	...
Poliomyelitis	2	1	1	...	...	...	...	...	...	...	...	...	...	...
Cerebro-spinal Fever	6	1	2	1	...	1	...	...	1	...	...	...	...	...
Simple Cont : Fever...............	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	10	...	...	...	...	1	1	4	1	3	...	...	...	...
Asiatic Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic Diarrhœa	36	29	6	...	...	...	...	...	...	1	...	...	...	...
Diarrhœa	191	153	34	1	1	...	...	...	...	...	...	1	...	1
Dysentery	3	...	...	...	...	...	...	...	3	...	...	...	...	...
Malarial Fever........................	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trench Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Actinomycosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hydrophobia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Glanders..............................	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anthrax	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tetanus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis	20	10	...	...	...	...	...	1	1	6	1	1	...	...
Gonorrhœa, Strict : Urethra....	10	...	...	...	...	...	...	...	...	3	5	1	1	...
Puerperal.. Septicæmia	16	...	...	...	...	...	2	9	5	...	...	...	...	...
Puerperal.. Pyæmia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal.. Phlegmasia Dol :.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal.. *Fever*................	2	...	...	...	...	...	1	1	...	...	...	...	...	...
Infective Endocarditis	14	...	...	1	1	3	1	6	...	1	1	..	...	...
Epidemic Pneumonia / Pneumonic Fever	...	...	...	...	...	...	...	...	...	...	...	..	...	...
Erysipelas	31	7	...	...	...	2	1	1	2	6	6	4	2	...
Septicæmia (not puerp :).........	13	...	1	1	...	1	...	4	2	...	2	1	...	1
Pyæmia (not puerp :)............	1	...	...	...	...	1	...	...	...	...	...	...	...	...
Phlegmon	8	1	...	...	1	...	...	1	...	2	1	1	1	...
Phagedæna ....:..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Septic Diseases............	4	1	1	...	...	...	...	...	1	1	...	...	...	...
Tubercular Phthisis	929	3	12	7	13	104	90	169	181	216	96	37	1	...
Phthisis	68	...	1	1	1	5	7	10	12	18	9	3	1	...
Tubercular Meningitis...........	71	8	32	15	4	5	1	3	1	1	...	...	...	...

TABLE A, 1925—*continued.*

CAUSES OF DEATH	All Ages	Under 5 Years: 0 to 1	Under 5 Years: 1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
A.—General Diseases— *continued*														
Tubercular Peritonitis	32	3	8	5	2	3	2	4	1	3	1	...	...	...
Tabes Mesenterica	4	1	...	...	1	1	...	1	...	...	...	...	...	...
Lupus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tubercle of other organs	46	1	9	...	5	5	6	3	5	5	5	2	...	...
General Tuberculosis	31	3	6	2	1	2	3	5	1	5	3	...	...	...
Scrofula	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Parasitic Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Starvation	...	...	...	...	...	...	...	...	...	...	...	..	.	...
Scurvy	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alcoholism, Delirium Tremens	8	...	...	...	...	...	...	...	1	2	3	2	...	...
Opium, Morphia Habit	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ptomaine Poisoning	1	...	...	...	...	...	...	...	...	...	...	1	..	...
Industrial Poisoning: Lead	1	...	...	...	...	...	...	1	...	...	...	...	...	...
Industrial Poisoning: Phosphorus	...	...	...	...	...	...	...	...	...	...	...	...	..	...
Industrial Poisoning: Arsenic, &c.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rheum: Fever, Acute Rheum:	58	...	2	9	15	8	6	6	3	6	...	2	1	...
Rheumatism of Heart	2	...	...	1	...	...	...	...	...	...	1	...	...	...
Chronic Rheumatism	38	...	...	...	...	...	...	3	2	3	8	11	7	4
Rheum: Arthritis, Rheum: Gout	52	...	...	...	..	...	...	1	2	4	11	24	9	1
Gout	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer—Buccal Cavity	77	...	...	...	...	...	...	1	3	17	29	18	8	1
,, Stomach and Liver	336	...	...	...	...	...	...	4	24	62	118	88	38	2
,, Peritoneum, Intest., Rectum	183	...	...	...	...	1	1	2	5	28	72	57	14	3
,, Female Genital Organs	111	...	...	1	...	...	...	2	11	32	36	20	9	...
,, Breast	101	...	...	...	...	...	...	1	16	30	27	17	10	...
,, Skin	15	...	...	...	...	...	...	...	...	1	6	2	5	1
,, Others or unspecified	232	1	1	...	1	1	1	4	14	51	76	66	14	2
Rickets	22	5	17	...	...	...	...	...	...	...	...	...	...	...
Purpura	5	1	...	1	...	...	...	1	...	2	...	...	...	...
Hæmophilia, Hæm: Diathesis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anæmia, Leucocythæmia	88	3	2	1	3	3	1	5	8	23	22	12	4	1
Diabetes Mellitus	71	...	...	...	2	1	2	4	9	11	15	20	7	...
Other Constitutional Diseases	1	...	...	...	...	...	...	...	...	1	...	...	...	...
Premature Birth	281	281	...	...	...	...	...	...	...	...	...	...	...	...
Congenital Defects	95	85	5	3	1	1	...	...	...	...	...	..	...	...
Injury at Birth	31	31	...	...	...	...	...	...	...	...	...	...	...	...
Atelectasis	18	18	...	...	...	...	...	...	...	...	...	...	...	...
Want of Breast Milk	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Teething	14	14	...	...	...	...	...	...	...	...	...	...	...	...
Others of Early Infancy	8	5	3	...	...	...	...	...	...	...	...	...	...	..
B.—Local Diseases.														
1.—NERVOUS SYSTEM.														
Inflammation of Brain	39	9	16	4	3	1	3	1	...	1	1	...	...	...
Softening of Brain	4	...	...	...	...	...	...	...	...	...	1	3	...	...
General Paraly: of Insane	47	...	...	...	...	1	...	3	17	16	8	2	...	...
Insanity (not puerperal)	39	...	1	...	...	...	...	4	4	15	13	2	...	...
Chorea	3	...	...	1	1	1	...	...	...	...	...	...	...	..
Epilepsy	41	...	3	1	3	1	3	3	10	5	9	2	1	...
Convulsions	69	62	7	...	...	...	...	...	...	...	...	...	...	...
Laryngismus Stridulus	1	1	...	...	...	...	...	..	...	...	...	...	...	..
Locomotor Ataxy	13	...	...	...	...	...	...	...	4	...	5	4	...	...
Dis: of Spinal Cord	53	...	...	...	...	...	2	3	6	4	19	16	3	...
Neuritis	4	...	...	...	...	...	...	...	...	2	1	...	...	1
Brain Tumour	23	2	2	1	2	...	...	4	5	4	2	1	...	...
Polio Encephalitis	4	2	1	...	1	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	24	...	2	3	3	1	...	3	6	4	2	...	..	...
Nervous System (other Dis:)	11	2	1	...	...	...	1	...	1	2	2	1	...	1
2. DISEASES OF SPECIAL SENSE ORGANS.														
Otitis, Mastoid Disease	34	4	2	5	3	5	5	5	2	1	1	1	...	...
Epistaxis, Nose Disease	...	...	...	...	...	...	...	...	...	...	...	...	...	..
Ophthalmia, Eye Disease	2	1	...	...	1	...	...	...	...	...	..	...	..	...

TABLE A, 1925—*continued.*

CAUSES OF DEATH	All Ages	Under 5 Years		Ages at Death										
		0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
3. DISEASES OF HEART.														
Valvular Dis : Endocarditis	504	3	...	6	8	13	16	36	50	96	118	95	58	5
Pericarditis	13	...	...	...	...	...	2	3	1	3	2	2	...	...
Hypertrophy of Heart	2	...	...	...	...	...	...	...	...	...	1	1	...	...
Angina Pectoris	37	...	...	...	...	...	...	...	2	2	16	10	7	...
Dilatation of Heart	66	...	...	...	...	1	...	1	3	10	15	22	13	1
Fatty Degen : of Heart	30	...	...	...	...	...	...	1	2	8	12	5	2	...
Syncope, Heart Disease	481	1	...	1	3	1	4	8	26	49	122	171	85	10
4. DIS : OF BLOOD VESSELS.														
Cerebral Hæmorrhage	412	...	...	...	...	...	...	6	11	38	98	159	89	11
Apoplexy, Hemiplegia	86	1	...	...	...	...	...	1	4	3	18	35	22	2
Aneurism	17	...	...	...	1	...	1	1	4	5	4	1	...	...
Senile Gangrene	18	...	...	...	...	...	...	...	...	1	1	8	5	3
Embolism, Thrombosis	62	...	...	...	1	...	1	4	2	13	15	12	9	5
Phlebitis	3	...	...	1	...	...	...	...	...	...	2	...	...	...
Varicose Veins	2	...	...	...	...	...	...	...	...	1	...	1	...	...
Blood Vessels (Other Diseases)	436	...	...	...	...	...	...	2	2	29	52	169	150	32
5. DIS : OF RESPIRATORY SYS :														
Laryngitis	3	...	2	1	...	...	...	...	...	...	...	...	...	...
Memb: Laryng: (Not Diphth:)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Larynx (Other Dis :)	3	...	1	...	...	...	...	...	...	...	...	2	...	...
Bronchitis	1,371	130	59	7	2	2	3	12	55	139	251	400	274	37
Pneumonia { Lobar-Croupous.	409	24	28	7	4	12	12	45	62	78	84	37	15	1
{ Broncho-Lobular.	530	172	161	16	4	4	4	11	18	42	37	33	24	4
"*Pneumonia*"	22	1	1	1	...	...	2	...	3	6	1	3	4	...
Emphysema, Asthma	28	...	...	...	...	...	...	1	4	6	7	8	2	...
Pleurisy	33	1	3	...	...	...	1	2	5	7	8	5	1	...
Fibroid Disease of Lung	1	...	...	...	...	...	...	...	...	...	...	1	...	...
Respiratory Dis: (Other)	34	3	...	...	...	1	...	2	1	5	2	8	9	3
6. DIS: OF DIGESTIVE SYS:														
Tonsillitis, Quinsy	10	...	...	3	2	3	...	...	...	1	1	...	...	...
Mouth, Pharynx	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Gastric Ulcer	60	...	...	...	...	...	...	4	15	18	15	7	1	...
Gastric Catarrh	2	1	...	...	...	...	...	...	...	...	...	1	...	...
Stomach (Other Dis:)	38	14	1	...	...	...	...	2	1	2	2	5	9	2
Enteritis	1	...	...	...	...	...	...	1	...	...	...	...	...	...
Gastro-Enteritis	8	...	...	...	...	...	...	...	...	2	2	3	1	...
Appendicitis, Perityph :	52	...	6	5	3	10	7	4	3	5	6	3	...	...
Hernia	29	1	...	...	...	1	...	1	5	3	7	10	1	...
Intestinal Obstruct:	26	6	3	...	1	...	1	2	1	1	2	7	2	...
Other Diseases of Intestines	19	1	...	...	2	...	...	2	3	4	4	2	1	...
Peritonitis	20	...	...	2	...	5	...	3	3	2	3	1	1	...
Cirrhosis of Liver	40	...	...	...	...	...	...	...	3	11	17	7	2	...
Liver	21	...	1	...	1	...	2	...	...	1	2	10	3	1
Biliary Calculi	24	...	...	...	...	...	...	...	...	11	5	8	...	...
Digestive System (Other Dis:)	13	1	...	...	...	1	...	...	3	5	2	1	...	..
7. DIS : OF LYMPHATIC AND DUCTLESS GLANDS.														
Spleen, Disease of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lymphat: Syst: (Other Dis:)	24	3	2	...	...	1	2	3	1	10	2	...	...	...
Thyroid Body (Other Dis:)	2	...	...	...	...	...	1	...	...	...	...	...	1	...
Addison's Dis : (Dis: of)	9	...	...	...	...	...	1	3	1	2	1	1	...	...
8. DISEASES OF URINARY SYSTEM.														
Nephritis Ac: Uræmia	54	...	3	6	1	3	1	3	8	11	6	9	3	...
Ch : Bright's Dis : Albumin :	189	...	...	...	7	5	3	8	18	30	37	45	12	4
Calculus	10	...	...	...	...	...	...	1	3	2	3	1	...	...
Bladder and Prostate Dis :	61	...	...	...	...	1	...	...	1	6	12	29	9	3
Urinary Syst : (Other Dis :)	17	2	...	...	...	...	2	1	4	3	1	4	...	...

TABLE A, 1925—*concluded.*

CAUSES OF DEATH	Ages at Death													
	All Ages	Under 5 Years		5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
		0 to 1	1 to 5											
9. DISEASES OF GENERATIVE SYSTEM.														
Ovarian Tumour	8	...	...	...	...	1	...	...	1	1	3	1	1	...
Other Dis: of Ovary	1	...	...	...	...	...	...	...	...	...	...	1	...	...
Uterine Tumour	2	...	...	...	...	...	...	...	...	...	1	...	1	...
Other Dis: of Uterus and Vagina	3	...	...	...	...	...	...	...	2	...	...	1	...	...
Disord: of Menstruation	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gener: and Mam: Orgs: (other)	7	...	...	...	...	...	...	2	3	...	2	...	...	...
10. DISEASES OF PREGNANCY AND CHILDBIRTH.														
Abortion, Miscarriage	4	...	...	...	...	...	...	3	1	...	...	...	...	...
Puerperal Mania	1	...	...	...	...	...	...	...	1	...	...	...	...	...
Puerperal Convulsions	6	...	...	...	...	1	1	1	3	...	...	...	...	...
Placenta Præv: Flooding.........	1	...	...	...	...	...	...	1	...	...	...	...	...	...
Other Ac: of Preg: & Childbirth	16	...	...	...	...	...	6	7	3	...	...	...	...	...
11. DISEASES OF LOCOMOTOR SYSTEM.														
Caries, Necrosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arthritis, Periostitis	5	1	...	...	...	...	...	...	1	...	...	2	1	...
Locomotor Sys: (Other).........	12	...	2	3	1	1	...	...	...	3	1	1	...	...
12. DISEASES OF THE SKIN.														
Ulcer, Bedsore	4	...	...	...	...	...	1	...	1	...	...	1	1	...
Eczema	3	2	...	...	...	...	...	...	...	...	...	1	...	...
Pemphigus..........................	16	16	...	...	...	...	...	...	...	...	...	...	...	...
Skin Diseases (other)	12	5	...	...	...	...	...	1	1	3	1	1	...	...
C.—Other Specified Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...
D.—Ill-defined and not Specified Diseases.														
Atrophy, Debility..................	69	69	...	...	...	...	...	...	...	...	...	...	...	...
Old Age	459	...	...	...	...	...	...	...	...	...	16	122	250	71
Dropsy, Ascites, Anasarca	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tumour	11	...	...	...	...	...	...	...	1	6	4	...	...	...
Abscess	5	...	2	...	1	...	...	1	1	...	...	...	..	...
Hæmorrhage	...	...	...	...	...	...	...	...	...	...	...	...	..	...
Sudden (cause unascertained)...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Ill-defined	...	...	...	...	...	...	...	...	...	...	...	...	...	...
E.—Violent Deaths.														
1. ACCIDENT.														
In Mines and Quarries...........	1	...	...	...	...	...	...	...	1	...	...	...	...	...
By Vehicles { On Railways ...	9	...	1	...	...	2	1	1	1	1	1	1	...	...
By Vehicles { In Streets.........	57	...	5	3	4	10	4	5	7	7	6	2	4	...
Ships, Boats, Docks (not Drowning)	1	...	...	...	...	...	...	...	...	1	...	..	...	...
Building Operations...............	3	...	...	...	...	...	1	1	...	1	...	...	...	...
Machinery	7	...	...	1	...	...	...	1	3	2	...	...	...	...
Weapons and Implements	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Burns and Scalds	42	1	18	7	1	1	3	2	...	1	1	3	3	1
Poison, Poisonous Vapours......	13	1	1	...	...	...	1	...	2	2	2	1	3	...
Drowning	27	...	1	2	2	1	3	3	2	4	6	3	...	...
Suffocation..........................	10	8	...	...	...	1	...	1	...	...	...	...	...	...
Falls	82	1	...	..	1	2	2	6	9	19	13	20	7	2
Weather Agencies..................	2	...	...	...	...	...	...	...	...	1	...	1	...	...
Otherwise or not Stated	18	...	5	1	1	...	2	3	1	2	2	1	...	...
2. HOMICIDE.	8	2	3	...	...	...	1	1	1	...	...	...	...	...
3. SUICIDE.	82	...	...	...	...	4	4	11	18	17	23	5	...	...
4. EXECUTION.	1	...	...	...	...	...	...	1	...	...	...	...	...	...

TABLE B.—MANCHESTER, 1925.

Causes of Deaths at Different Life Periods—MALES.

Classes	CAUSES OF DEATH	All Ages Total	Under 5 Years 0 to 1	Under 5 Years 1 to 5	Ages at Death—in years 5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
	All Causes	5719	777	428	107	67	126	108	261	457	846	997	999	474	72
	Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	..
	Measles	76	19	52	5	...	...	...	...	...	...	...	...	...	..
	Scarlet Fever	22	1	15	4	1	...	...	...	1	...	...	...	...	..
	Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Whooping Cough	90	38	50	2	...	...	...	...	...	...	...	...	...	...
	Diphtheria	49	5	23	16	3	...	1	...	1	...	...	...	...	...
	Ill-defined Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Enteric Fever	8	...	...	...	...	...	1	4	...	3	...	...	...	...
	Influenza	124	6	5	...	...	6	4	9	14	28	25	22	5	..
	Epidemic Diarrhœa	17	14	2	...	...	...	...	...	...	1	...	...	...	...
	Diarrhœa, Dysentery, Simple Cholera	125	97	23	1	...	...	...	...	3	...	..	1	...	.
	Venereal Affections	18	5	...	...	...	...	...	..	...	5	6	1	1	...
	Erysipelas	16	4	...	...	...	1	1	1	1	4	2	2	...	..
	Pyæmia, Septicæmia (others)	6	...	1	...	...	2	...	1	...	...	1	1	...	...
A	Other Zymotics	19	2	2	1	2	2	1	4	1	2	1	1	...	...
	Tuberc. Periton: Tabes Mes:	18	3	4	4	1	2	1	...	...	2	1	...	...	...
	Tubercular Meningitis	34	6	14	6	2	1	1	2	...	1	1	...	...	...
	Phthisis	601	2	8	5	4	40	35	89	135	173	81	28	1	...
	Tuberculous Dis. (other)	45	1	10	...	6	2	7	4	3	7	4	1	...	...
	Parasitic Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Alcoholism	4	...	...	...	...	...	...	...	1	1	1	1	...	...
	Rheumatic Fever	16	...	2	4	2	2	2	2	...	2	...	...	...	...
	Cancer	542	...	1	...	1	...	2	5	30	111	205	142	42	3
	Premature Birth	139	139	...	...	...	...	..	...	...	...	...	...	...	...
	Congenital Defects	56	50	3	1	1	1	...	...	...	...	...	...	...	...
	Atelectasis	11	11	...	...	...	...	...	...	...	...	...	...	..	...
	Epilepsy	12	...	...	...	...	...	1	...	4	1	6	...	...	..
	Convulsions	41	36	5	...	..	...	...	...	...	...	..	...	...	..
	Nervous Syst: (other)	152	10	18	5	6	1	4	9	22	28	31	17	1	...
	Cereb: Haem: Apoplexy, Hemip:	215	...	...	...	...	...	..	5	6	18	58	88	33	7
	Heart and Blood Vessel Dis:	807	2	...	3	4	9	7	19	45	114	178	257	150	19
	Pleurisy	23	1	3	...	...	...	..	1	3	5	6	4	...	...
B and C	Bronchitis	688	82	31	5	1	1	2	7	37	88	138	196	89	11
	Pneumonia	595	125	102	17	6	13	13	40	54	90	77	36	19	3
	Respiratory Dis: (other)	32	1	3	1	...	1	...	1	2	6	3	9	5	...
	Cirrhosis	31	...	...	...	...	...	...	..	2	8	15	4	2	...
	Digestive Syst: (other)	182	16	8	7	5	12	5	8	25	36	28	26	4	2
	Urinary Syst: (other)	214	2	3	5	6	5	3	7	15	39	48	61	16	4
	Generative Organs	1	..	...	...	...	...	...	...	...	...	1	...	...	..
	Other specified Diseases	217	55	19	7	8	8	6	15	12	27	25	24	10	1
	Marasmus and Atrophy	36	36	...	...	...	...	..	...	...	...	..	...	...	...
D	Old Age	181	...	...	...	...	..	...	..	...	...	11	58	90	22
	Other Ill-defined Causes	11	...	...	...	1	...	...	1	2	4	3	...	...	.
	Violence	174	6	19	8	7	15	9	17	22	30	21	14	6	...
E	Homicide	5	2	2	...	...	...	...	...	1	...	...	...	...	...
	Suicide	65	...	...	...	...	2	2	9	15	12	20	5	...	...
	Execution	1	...	...	...	...	...	...	1	...	...	...	...	...	...

TABLE C.—MANCHESTER, 1925.

Causes of Deaths at Different Life Periods—FEMALES.

Classes	CAUSES OF DEATH	All Ages Total	Under 5 Years		Ages at Death—in years										
			0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
	All Causes	5197	576	374	91	63	133	135	273	333	535	772	989	774	149
A	Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles	53	8	44	1	...	...	...	...	...	...	...	...	...	...
	Scarlet Fever	34	...	20	9	2	1	1	1	...	...	...	...	...	...
	Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Whooping Cough	116	46	65	4	...	...	...	...	...	...	1	...	...	...
	Diphtheria	53	4	31	16	...	2	...	...	...	...	...	...	...	..
	Ill-defined Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Enteric Fever	2	...	...	...	..	1	...	...	1	..	...	...	...	...
	Influenza	138	2	4	2	3	3	1	15	12	12	26	33	21	4
	Epidemic Diarrhœa	19	15	4	...	...	...	...	...	...	...	...	...	...	...
	Diarrhœa, Dysentery, Simple Cholera	69	56	11	...	1	...	...	...	...	...	...	...	...	1
	Venereal Affections	12	5	...	...	...	...	...	1	1	4	...	1	...	...
	Erysipelas	15	3	...	...	...	1	...	...	1	2	4	2	2	...
	Pyæmia, Septicæmia (others)	9	...	1	1	...	...	...	3	2	...	1	...	...	1
	Puerperal Fever	18	...	...	...	...	...	3	10	5	...	...	...	...	...
	Other Zymotics	25	6	5	2	1	2	...	3	1	3	1	...	1	...
	Tubercular Periton: Tabes Mes.	18	1	4	1	2	2	1	5	1	1	...	...	...	...
	Tubercular Meningitis	37	2	18	9	2	4	...	1	1	...	...	...	...	...
	Phthisis	396	1	5	3	10	69	62	90	58	61	24	12	1	..
	Tuberculous Diseases (other)	32	3	5	2	...	5	2	4	3	3	4	1	...	...
	Parasitic Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Alcoholism	4	...	...	...	...	...	...	...	...	1	2	1	...	...
	Rheumatic Fever	42	...	...	5	13	6	4	4	3	4	...	2	1	...
	Cancer	513	1	...	1	...	2	...	9	43	110	159	126	56	6
	Premature Birth	142	142	...	...	...	...	...	...	...	...	...	...	...	...
	Congenital defects	39	35	2	2	...	...	...	...	...	...	...	...	...	...
	Atelectasis	7	7	...	...	...	...	..	...	...	...	...	...	...	..
B and C	Epilepsy	29	...	3	1	3	1	2	3	6	4	3	2	1	...
	Convulsions	28	26	2	...	...	...	...	...	...	...	...	...	...	...
	Nervous System (other)	113	6	5	4	4	3	2	9	21	20	23	12	2	2
	Cerebral Hæmorrhage, Apoplexy, and Hemiplegia	283	1	...	...	...	...	...	2	9	23	58	106	78	6
	Heart and Blood Vessel Diseases	864	2	...	5	9	6	17	37	47	103	182	240	179	37
	Pleurisy	10	...	...	...	...	...	1	1	2	2	2	1	1	...
	Bronchitis	683	48	28	2	1	1	1	5	18	51	113	204	185	26
	Pneumonia	366	72	88	7	2	3	5	16	29	36	45	37	24	2
	Respiratory Diseases (other)	38	2	1	...	...	...	...	2	3	5	6	10	6	3
	Cirrhosis	9	...	...	...	...	...	...	...	1	3	2	3	...	...
	Digestive System (other)	142	8	4	3	4	8	5	11	9	19	23	32	15	1
	Urinary System (other)	117	...	...	1	2	4	3	6	19	13	31	27	8	3
	Generative Organs and Childbirth	48	...	...	...	...	2	7	14	14	1	5	3	2	...
	Other specified Diseases	242	36	11	4	2	3	7	12	16	36	38	52	20	5
D	Marasmus and Atrophy	33	33	...	...	...	...	...	...	...	...	...	...	...	...
	Old Age	278	...	...	...	...	...	...	...	...	...	5	64	160	49
	Other Ill-defined Causes	3	...	...	...	...	...	...	...	...	2	1	...	...	...
E	Violence	98	5	12	6	2	2	8	6	4	11	10	18	11	3
	Homicide	3	...	1	...	...	...	1	1	...	...	...	...	...	...
	Suicide	17	...	..	..	...	2	2	2	3	5	3	...	...	...

TABLE D.

MANCHESTER, 1925.—CAUSES OF DEATH IN INFANCY AND CHILDHOOD.

CAUSES OF DEATH	UNDER ONE YEAR			Total under One Year	ONE AND UNDER FIVE YEARS				Total under Five Years
	Under 3 months	3–6 months	6–12 months		1–	2–	3–	4–	
All Causes	726	230	397	1,353	410	187	113	92	2,155
Chicken Pox	...	...	2	2	...	...	...	...	2
Measles	2	...	25	27	46	24	17	9	123
Scarlatina	...	...	1	1	9	10	10	6	36
Whooping Cough	12	9	63	84	71	20	18	6	199
Diphtheria	1	1	7	9	12	11	11	20	63
Erysipelas	5	1	1	7	...	...	...	...	7
Diarrhœal Diseases	60	69	53	182	32	6	2	...	222
Gastritis	11	2	1	14	...	1	...	...	15
Syphilis	7	3	...	10	...	...	...	...	10
Tabes Mesenterica and Tuberc. Peritonitis	...	1	3	4	5	2	...	1	12
Tubercular Meningitis	1	2	5	8	11	9	7	5	40
Tuberculosis (other)	...	...	7	7	12	6	2	8	35
Rickets	1	1	3	5	12	4	...	1	22
Premature Birth	271	7	3	281	...	...	...	...	281
Injury at Birth	31	...	...	31	...	...	...	...	31
Atelectasis	18	...	...	18	...	...	..	...	18
Congenital Malformations	74	10	1	85	2	2	...	1	90
Convulsions	42	8	12	62	5	1	1	...	69
Meningitis	...	3	6	9	7	7	1	1	25
Nervous Diseases (other)	1	1	5	7	1	4	2	3	17
Bronchitis	39	35	56	130	36	18	4	1	189
Pneumonia	36	50	111	197	123	38	21	8	387
Other Respiratory Diseases	3	1	...	4	1	2	3	1	11
Atrophy, Marasmus	49	12	8	69	...	...	...	...	69
Found Dead in Bed (overlaid)	7	...	...	7	...	...	...	...	7
Suffocation	1	...	...	1	...	...	...	...	1
Violence (other forms)	1	2	2	5	10	10	5	9	39
Ill-defined Causes	...	...	...	...	...	..	...	...	...
Unclassified	53	12	22	87	15	12	9	12	135

SPECIFIED CAUSES, AND (*c*) INFANTILE MORTALITIES; ALSO THE PERCENTAGES TO TOTAL DEATHS OF INQUEST CASES AND OF DEATHS IN PUBLIC INSTITUTIONS; ALSO QUINQUENNIAL AVERAGES 1871-1925.

	Year	Estimated Population (Mean)	Persons Married	Annual Rates per 1,000 persons living												Percentage to Total Deaths		Infantile Mortality	Year
				Births	Deaths (all causes)	Smallpox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Typhus Fever	Enteric Fever	Simple Continued Fever	Diarrhœal Diseases	Violence	Inquest Cases	Deaths in Public Institutions		
Quinquennial Average	1871–1875	477,344	24·6	38·9	28·3	0·26	0·64	1·08	0·08	0·78	0·14	0·43	0·21	1·95	0·94	7·2	13·4	198	.. 1871–1875
	1876–1880	509,802	18·6	38·7	26·2	0·24	0·53	1·07	0·13	0·84	0·08	0·29	0·11	1·26	0·89	7·5	14·3	172	.. 1876–1880
	1881–1885	542,746	17·9	35·1	23·6	0·04	0·71	0·48	0·10	0·68	0·05	0·20	0·03	0·99	0·72	7·0	15·9	175	.. 1881–1885
	1886–1890	575,630	16·6	33·4	24·6	0·02	0·83	0·50	0·32	0·54	0·02	0·30	0·01	1·08	0·78	6·9	17·7	183	.. 1886–1890
	1891–1895	517,801	16·9	33·2	23·6	0·03	0·62	0·26	0·27	0·64	0·00	0·24	0·01	1·19	0·77	7·1	19·2	186	.. 1891–1895
	1896–1900	539,599	18·2	32·5	22·7	..	0·89	0·20	0·13	0·53	0·00	0·18	0·01	1·69	0·73	7·1	20·2	192	.. 1896–1900
	1901–1905	554,355	17·4	30·9	20·1	0·01	0·55	0·19	0·22	0·41	0·00	0·13	0·00	1·15	0·72	7·1	24·4	173	.. 1901–1905
	1906–1910	660,049	17·0	28·1	17·7	..	0·54	0·16	0·17	0·37	0·00	0·10	0·00	0·76	0·68	7·4	27·3	147	.. 1906–1910
	1911–1915	731,677	17·6	24·8	16·4	..	0·50	0·12	0·14	0·25	..	0·05	..	0·84	0·67	7·9	30·8	133	.. 1911–1915
	1916–1920	770,330	16·7	19·2	14·1	..	0·24	0·04	0·08	0·21	..	0·02	0·00	0·30	0·49	6·4	32·3	105	.. 1916–1920
	1921–1925	751,288	16·8	20·6	13·9	..	0·25	0·06	0·10	0·20	..	0·01	..	0·33	0·44	5·7	37·8	95	.. 1921–1925
	1921 (Census) ..	744,000	19·3	23·7	13·6	..	0·01	0·08	0·12	0·23	..	0·02	..	0·52	0·47	5·8	36·4	97	 1921
	1922..	746,986	16·7	21·2	14·3	..	0·47	0·08	0·11	0·13	..	0·01	..	0·26	0·48	5·8	36·1	96	 1922
	1923..	752,100	14·5	20·5	13·3	..	0·11	0·04	0·06	0·24	..	0·01	..	0·27	0·34	5·5	38·8	88	 1923
	1924..	755,119	16·6	19·2	14·0	..	0·48	0·04	0·08	0·15	..	0·02	..	0·28	0·41	5·6	37·7	100	 1924
	1925..	758,235	17·0	18·6	14·4	..	0·17	0·07	0·13	0·27	..	0·01	..	0·30	0·48	5·7	39·9	96	 1925

The populations and rates prior to 1891 are those for the Unions of Manchester, Chorlton, and Prestwich, which have been taken to approximately represent "Manchester." The City was extended to include Moss Side and Withington in November, 1904, and to include Gorton and Levenshulme n November 1909.

TABLE F.

MANCHESTER—ANNUAL RATES OF MORTALITY FROM CERTAIN CAUSES OF DEATH.

YEAR	ANNUAL RATES PER 1,000 PERSONS LIVING										RATES PER 1,000 BIRTHS	
	Cancer	Tuberc. Peritonitis Tabes Mes.	Phthisis	Other Tuberc. Diseases	Diseases of Nervous System	Diseases of Heart and Blood Vessels	Diseases of Respiratory System	Diseases of Digestive System	Diseases of Urinary System	Diseases of Generative System	Puerperal Fever	Childbirth
1881-1885 ..	0·50	0·35	2·42	0·57	3·28	1·37	5·41	1·23	0·48	0·08	3·03	1·9
1886-1890 ..	0·64	0·36	2·24	0·59	3·09	1·73	5·76	1·23	0·61	0·08	3·22	2·1
1891-1895 ..	0·62	0·22	2·09	0·75	1·74	2·53	5·56	1·07	0·52	0·07	2·75	3·4
1896-1900 ..	0·73	0·19	2·04	0·63	1·32	2·54	5·03	1·04	0·49	0·09	1·55	1·5
1901-1905 ..	0·80	0·16	1·94	0·55	1·17	2·56	4·29	0·95	0·49	0·08	1·21	1·7
1906-1910 ..	0·88	0·14	1·65	0·45	0·95	2·56	3·75	0·84	0·54	0·07	1·28	1·4
1911-1915 ..	1·01	0·12	1·59	0·38	0·79	2·34	3·45	0·68	0·56	0·09	1·24	2·1
1916-1920 ..	1·08	0·09	1·39	0·28	0·54	2·27	2·98	0·51	0·47	0·06	1·58	1·8
1921-1925 ..	1·34	0·06	1·26	0·24	0·51	2·58	3·03	0·47	0·46	0·07	1·54	2·0
1921	1·26	0 07	1·30	0·27	0·54	2·37	2·79	0·51	0·47	0·08	1·59	1·6
1922	1·28	0·06	1·27	0·27	0·50	2·45	3·23	0·42	0·51	0·08	1·89	1·8
1923	1·39	0·07	1·24	0·23	0·46	2·56	2·81	0·52	0·43	0·06	1·31	2·0
1924	1·37	0·06	1·18	0·24	0·55	2·65	3·09	0·44	0·46	0·08	1·63	2·6
1925 .. .	1·39	0·05	1·31	0·19	0·49	2·86	3·22	0·48	0·44	0·06	1·27	1·9

See footnotes to Table E.

TABLE G, 1925.—POPULATION, AREA, DENSITY. TOTAL BIRTHS AND DEATHS, WITH BIRTH AND DEATH RATES.

[INSTITUTION POPULATIONS, BIRTHS AND DEATHS, DISTRIBUTED.]

WARDS	Estimated Population	Area in Acres	Persons to an Acre	BIRTHS		DEATHS		Natural Rate of Increase
				Total	Rate per 1,000	Total	Rate per 1,000	
City	**758,235**	**21,690**	**35**	**14,127**	**18·63**	**10,916**	**14·40**	**4·23**
All Saints	26,194	300	87	538	20·54	450	17·18	3·36
Ardwick	30,611	426	72	647	21·15	472	15·42	5·73
Beswick	32,566	254	128	646	27·41	404	17·14	10·27
Blackley	19,443	1,158	17	304	15·64	240	12·34	3·30
Bradford	27,688	790	35	607	21·92	350	12·64	9·28
Cheetham	26,461	555	48	405	15·31	325	12·28	3·03
Chorlton-cum-Hardy	33,793	1,666	20	514	15·21	386	11·42	3·79
Collegiate Church	19,711	446	44	328	16·64	248	12·58	4·06
Collyhurst	26,361	231	114	650	24·65	455	17·26	7·39
Crumpsall	12,308	2,203	6	157	12·76	163	13·24	− 0·48
Didsbury	13,765	2,357	6	235	17·07	181	13·15	3·92
Exchange	572	61	9	1	1·75	4	6·98	− 5·23
Gorton North	26,269	604	44	445	16·94	313	11·91	5·03
Gorton South	24,961	628	40	516	20·67	300	12·02	8·65
Harpurhey	25,688	342	75	457	17·79	354	13·78	4·01
Levenshulme	22,102	606	37	262	11·85	253	11 45	0·40
Longsight	21,487	593	36	328	15·27	288	13·40	1·87
Medlock Street	33,816	212	160	740	21·88	583	17·24	4·64
Miles Platting.................	27,204	313	87	624	22·94	391	14·37	8·57
Moston	20,865	1,231	17	254	12·17	226	10·83	1·34
Moss Side East	23,123	241	96	319	13·80	293	12·67	1·13
Moss Side West	22,950	267	86	342	14·90	326	14·20	0·70
New Cross	29,713	303	98	774	26·05	633	21·30	4·75
Newton Heath	20,776	1,007	21	395	19·01	300	14·44	4·57
Openshaw	26,143	482	54	479	18·32	383	14·65	3·67
Oxford	1,573	167	10	11	6·99	30	19·07	− 12·08
Rusholme	20,722	806	26	250	12·06	235	11·34	0·72
St. Ann's	232	55	4	2	8·62	1	4·31	4·31
St. Clement's	6,699	181	37	172	25·68	143	21·35	4·33
St. George's	31,611	266	12	700	22·14	534	16·89	5·25
St John's......................	5,997	199	30	109	18·18	141	23·51	− 5·33
St. Luke's	29,923	316	95	541	18·08	480	16·04	2·04
St. Mark's	29,679	340	87	619	20·86	397	13·38	7·48
St. Michael's	20,488	243	84	546	26·65	457	22·31	4·34
Withington	16,741	1,841	9	210	12·54	177	10·57	1·97

TABLE H, 1925.

BIRTHS REGISTERED IN THE CITY OF MANCHESTER, IN WARDS, AND DISTINGUISHING LEGITIMATE AND ILLEGITIMATE BIRTHS; ALSO THE PROPORTION OF MORTALITY AMONG INFANTS OF BOTH CLASSES UNDER ONE YEAR OF AGE.

WARDS	BIRTHS		Percentage of Illegitimate Births to Total Births	DEATHS UNDER 1 YEAR		PROPORTION OF DEATHS UNDER 1 YEAR PER 1,000 BIRTHS		
	Total	Illegitimate		Total	Of Illegitimate Children	Total	Legitimate	Illegitimate
City	14,127	654	4·6	1,353	99	96	93	152
All Saints	538	53	9·9	53	6	99	97	113
Ardwick	647	42	6·5	70	2	108	112	48
Beswick	646	13	2·0	68	1	105	106	77
Blackley	304	10	3·3	27	1	89	88	100
Bradford	607	12	2·0	52	2	86	84	167
Cheetham	405	16	3·9	25	2	62	59	124
Chorlton-cum-Hardy	514	11	2·1	33	1	66	64	91
Collegiate Church	328	21	6·4	20	2	61	59	95
Collyhurst	650	25	3·8	73	6	112	107	240
Crumpsall	157	2	1·3	15	5	96	65	...
Didsbury	235	10	4·3	8	1	34	31	100
Exchange	1	...	...	1	1	...	...	...
Gorton North	445	17	3·8	37	2	83	82	118
Gorton South	516	15	2·9	32	3	62	58	200
Harpurhey	457	13	2·8	44	...	96	99	...
Levenshulme	262	15	5·7	15	2	57	53	133
Longsight	328	11	3·4	27	...	82	85	...
Medlock Street	740	40	5·4	85	6	115	113	150
Miles Platting	624	24	3·8	58	6	93	87	250
Moston	254	6	2·4	20	1	79	77	166
Moss Side East	319	14	4·4	34	6	107	92	429
Moss Side West	342	15	4·4	20	3	58	52	200
New Cross	774	42	5·4	106	10	137	131	239
Newton Heath	395	13	3·3	25	...	63	65	...
Openshaw	479	18	3·8	57	...	119	124	...
Oxford	11	...	...	2	...	182	182	...
Rusholme	250	10	4·0	15	2	60	54	200
St. Ann's	2	...	...	...	...	500	500	...
St. Clement's	172	14	8·1	30	4	174	165	286
St. George's	700	38	5·4	77	3	110	112	79
St. John's	109	13	11·9	15	2	138	135	154
St. Luke's	541	55	10·2	67	10	124	117	182
St. Mark's	619	24	3·9	61	2	99	99	83
St. Michael's	546	38	7·0	64	6	117	114	158
Withington	210	4	1·9	17	1	81	78	250

TABLE L, 1925.

MANCHESTER.—Certification of the Causes of Death in the City and in the various Wards.

WARDS	Total Deaths	Certified by		Not Certified	Proportion per cent. of Deaths		
					Certified by		
		Registered Medical Practitioners	Coroner		Regist'd Medical Practitioners	Coroner	Not Certified
City	**10,916**	**10,226**	**620**	**70**	**93·7**	**5·7**	**0·6**
ll Saints	450	405	43	2	90·0	9·6	0·4
rdwick	472	440	30	2	93·2	6·4	0·4
eswick	404	385	18	1	95·3	4·5	0·2
lackley	240	221	19	...	92·1	7·9	...
radford	350	322	26	2	92·0	7·4	0·6
heetham	325	302	20	3	92·9	6·2	0·9
horlton-cum-Hardy	386	364	19	3	94·3	4·9	0·8
ollegiate Church	248	235	10	3	94·8	4·0	1·2
ollyhurst	455	427	24	4	93·8	5·4	0·8
rumpsall	163	155	6	2	95·1	3·7	1·2
idsbury.........	181	171	10	...	94·5	5·5	...
xchange	4	3	1	...	75·0	25·0	...
orton North......................	313	299	13	1	95·6	4·1	0·3
orton South	300	285	13	2	95·0	4·4	0·6
arpurhey	354	321	30	3	90·7	8·5	0·8
evenshulme	253	240	12	1	94·9	4·7	0·4
ongsight	288	264	19	5	91·7	6·6	1·7
edlock Street	583	555	23	5	95·2	3·9	0·9
iles Platting.....	391	363	27	1	92·8	6·9	0·3
oston	226	217	7	2	96·0	3·1	0·9
oss Side East	293	278	11	4	94·9	3·8	1·3
oss Side West	326	308	17	1	94·5	5·2	0·3
ew Cross	633	582	48	3	91·9	7·6	0·5
ewton Heath	300	288	11	1	96·0	3·7	0·3
penshaw	383	360	19	4	94·0	5·0	1·0
xford	30	27	3	...	90·0	10·0	...
usholme	235	218	16	1	92·8	6·8	0·4
t. Ann's............................	1	1	...	...	100·0	...	...
. Clement's	143	135	8	...	94·4	5·6	...
. George's	534	503	28	3	94·2	5·2	0·6
t. John's	141	129	11	1	91·5	7·8	0·7
. Luke's	480	446	29	5	93·0	6·0	1·0
. Mark's	397	376	21	...	94·7	5·3	...
. Michael's	457	438	17	2	95·7	3·9	0·4
ithington	177	163	11	3	92·1	6·2	1·7

NOTIFIABLE INFECTIOUS DISEASES OTHER THAN WHOOPING COUGH AND TUBERCULOSIS.

The diseases included in the Infectious Disease (Notification) Acts, 1889 and 1899, or regulations under the Public Health Acts, are as follows: Smallpox, Scarlet Fever, Diphtheria, Typhus Fever, Enteric or Typhoid Fever, Relapsing Fever, Continued Fever, Puerperal Fever, Erysipelas, and Asiatic Cholera, to which have been added Ophthalmia Neonatorum, Cerebro-Spinal Fever, Poliomyelitis, Polio-Encephalitis and Encephalitis-Lethargica, Malaria, Dysentery, Trench Fever, Acute Primary Pneumonia, and Acute Influenzal Pneumonia. The following cases were notified in 1925, and the numbers are compared with the average of the previous ten years:—

	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	Mean	192
Smallpox	..	..	..	..	14	4	..	4	..	..	2	..
Chickenpox ..	..	..	..	..	1,153	1,936	2,443	2,860	3,354	3,574	2,553	4,1
Scarlet Fever ..	2,922	1,185	829	779	1,758	3,829	5,400	3,618	1,814	1,784	2,392	2,8
Diphtheria	548	614	581	518	471	914	1,002	806	536	570	656	1,0
Typhus Fever ..	..	..	1	..	..	..	..	..	..	..	..	..
Enteric Fever ..	174	78	86	68	90	54	74	36	50	103	81	6
Relapsing Fever .	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever .	94	99	54	66	159	146	138	130	130	115	113	1
Erysipelas	492	320	228	243	392	382	385	379	294	284	340	41
Ophthalmia Neonatorum	414	379	315	307	344	392	227	263	227	336	320	2
Cerebro-Spinal Fever	15	7	7	5	11	11	3	8	3	11	8	
Poliomyelitis ..	8	9	14	10	8	7	7	7	4	7	8	1
Polio-Encephalitis	..	..	..	..	4	1	..	..	..	1	1	
Encephalitis-Lethargica	..	..	..	..	10	31	19	9	38	244	58	[illegible]
Malaria	..	..	..	..	312	172	38	19	16	3	93	
Dysentry	..	..	..	..	6	9	8	3	2	2	5	
Trench Fever ..	..	..	..	..	1	1	1	1	..	..	1	..
Primary Pneumonia	..	..	..	..	410	620	1,578	2,268	2,067	2,203	1,528	2,2
Influenzal Pneumonia	..	..	..	..	816	205	218	487	426	447	433	3
Measles	..	9,230	10,613	8,448	8,420	10,635	1,135	19,614	3,481	18,349	9,992	7,9
Rubeola	..	1,262	621	675	186	179	453	177	94	224	430	2,1
Pemphigus Neonatorum	..	..	..	..	..	..	..	..	..	..	..	[illegible]
	4,667	13,183	13,349	11,119	14,565	19,528	13,129	30,689	12,536	28,257	19,014	21,7

In 1900 Erysipelas was made notifiable, in 1910 Ophthalmia Neonatorum, in 1912 Cerebro-Spinal Fever and Poliomyelitis, and in 1919 the diseases which first appear under that year. Measles were made notifiable in 1916, as was also Rubeola.

From 1919 (September) Chickenpox has been notifiable, and in 1925 (September) Pemphigus Neonatorum was made notifiable.

The deaths from the more common diseases are shown in the following figures :—

Years	Measles	Scarlet Fever	Diphtheria	Enteric Fever	Influenza	Whooping Cough	Diarrhœa	Phthisis
1915–24 average	219	42	68	15	504	144	264	1052
1925	129	56	102	10	262	206	227	997

SMALLPOX.

No cases of smallpox were notified during the year 1925.

CHICKENPOX.

Chickenpox was made a notifiable disease on September 15th, 1919, for six months, and its notifiability has been renewed from time to time since that date.

Chickenpox.—Number of Attacks at different Ages.

	1925
Under 1 year	249
1—2 years..	263
2—3 ,, ...	297
3—4 ,, ...	378
4—5 ,, ...	528
5—9 ,, ...	2,064
10—14 ,, ...	247
15—19 ,, ...	36
20—24 ,, ...	17
25—44 ,, ...	21
45 + ,, ...	5
Total	4,105

SCARLET FEVER.

The following figures show the course of the disease in quarters :—

TABLE I.—SCARLET FEVER.—ATTACKS IN QUARTERS ACCORDING TO DATE OF RASH.

Year	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
1920 ..	735	654	907	1533	3829
1921 ..	1124	890	1161	2225	5400
1922 ..	1104	1022	654	838	3618
1923 ..	528	516	385	385	1814
1924 ..	253	305	500	726	1784
Mean ..	749	677	721	1141	3288
1925 ..	662	642	802	763	2869

This table shows that the periodic wave is increasing.

TABLE 2.—1925.—SCARLET FEVER ATTACKS IN WARDS, WITH ATTACK RATE, CASE FATALITY PER CENT., AND REMOVALS TO HOSPITAL PER CENT.

WARDS	ATTACKS	ATTACK RATE PER 1,000 LIVING	† CASE FATALITY PER CENT.	REMOVALS TO HOSPITAL PER CENT.
City	2,869	3·8	2·2	72·2
All Saints	110	4·2	2·7	79·1
Ardwick	155	5·1	3·9	81·9
Beswick	99	3·0	—	87·9
Blackley	106	5·4	6·6	56·7
Bradford	93	3·4	1·1	73·1
Cheetham	109	4·1	—	63·3
Chorlton-cum-Hardy	108	3·2	0·9	44·4
Collegiate Church	150	7·6	1·3	89·3
Collyhurst	105	4·0	5·7	73·3
Crumpsall	49	4·0	2·1	73·4
Didsbury	59	4·3	1·7	64·4
Exchange	1	1·7	—	—
Gorton North	55	2·1	1·8	65·5
Gorton South	109	4·4	2·8	58·7
Harpurhey	105	4·1	1·9	68·6
Levenshulme	113	5·1	—	64·6
Longsight	84	3·9	3·6	58·3
Medlock Street	112	3·3	0·9	79·5
Miles Platting	72	2·6	1·4	84·7
Moston	66	2·9	1·5	51·5
Moss Side East	61	2·6	1·6	63·3
Moss Side West	51	2·2	—	56·8
New Cross	168	5·7	4·2	86·3
Newton Heath	112	5·4	—	73·2
Openshaw	76	2·9	2·6	78·9
Oxford	6	3·8	—	100·0
Rusholme	34	1·6	—	55·8
St. Ann's	—	—	—	—
St. Clement's	41	6·1	4·9	90·2
St. George's	127	4·0	0·8	83·4
St. John's	12	2·0	16·7	75·0
St. Luke's	88	2·9	2·3	60·3
St. Mark's	103	3·5	1·9	72·8
St. Michael's	85	4·1	4·7	89·4
Withington	45	2·7	—	60·0

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† Corrected ; the fatal cases are those actually occurring amongst the cases notified.

Table 3.—Scarlet Fever. Number of Attacks and of Deaths; also the Case Fatality per cent. at different Ages for the Thirty-four Years, 1891–1924, and for 1925.

Ages	1891–1924			1925		
	Attacks	Deaths	Case Fatality per cent.	Attacks	Deaths	Case Fatality per cent.
Under 1 year	724	118	16·3	18	2	11·1
1 to 2 years.. ..	2,148	302	14·1	53	4	7·5
2 to 3 ,, ...	4,702	474	10·1	176	14	7·9
3 to 4 ,, ...	6,573	518	7·9	239	11	4·6
4 to 5 ,, ...	7,653	449	5·9	352	9	2·5
5 to 6 ,, ...	8,364	286	3·4	422	3	0·7
6 to 7 ,, ...	7,873	192	2·4	252	4	1·6
7 to 8 ,, ...	6,951	131	1·9	199	5	2·5
8 to 9 ,, ...	5,887	93	1·6	179	2	1·1
9 to 10 ,, ...	4,935	77	1·6	159	2	1·2
10 to 15 ,, ...	14,810	169	1·1	443	3	0·7
15 to 20 ,, ...	4,633	70	1·5	164	1	0·6
20 to 25 ,, ...	2,207	41	1·9	93	1	1·1
25 to 35 ,, ...	2,067	47	2·3	83	1	1·2
35 to 45 ,, ...	621	17	2·7	29	1	3·4
45 and over	164	7	4·3	8	—	—
All Ages	80,294	2,991	3·7	2,869	63	2·2

Table 4 gives a comparison of the death-rates from scarlet fever in different areas, and shows that the death-rate is slightly higher than that for the entire country.

TABLE 4.—SCARLET FEVER MORTALITY, 1925.—RATE PER 1,000 LIVING, COMPARED WITH MEAN OF FIVE YEARS.

	1920	1921	1922	1923	1924	Mean	1925
England and Wales	0·04	0·03	0·04	0·03	0·02	**0·03**	0·03
105 Great Towns	0·04	0·04	0·05	0·03	0·03	**0·04**	0·03
London	0·05	0·06	0·07	0·02	0·03	**0·05**	0·02
Manchester City	0·06	0·08	0·07	0·04	0·04	**0·06**	0·07
157 Smaller Towns	0·03	0·03	0·03	0·02	0·02	**0·03**	0·02

SCARLET FEVER, 1925.—ATTACKS IN WEEKS, ACCORDING TO DATE OF RASH.

FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
Week of Year	1925	Week of Year	1925	Week of Year	1925	Week of Year	1925
1	40	14	52	27	68	40	94
2	52	15	46	28	67	41	82
3	66	16	41	29	59	42	89
4	47	17	42	30	39	43	84
5	41	18	45	31	46	44	67
6	49	19	64	32	58	45	71
7	54	20	53	33	68	46	55
8	54	21	54	34	58	47	45
9	46	22	34	35	54	48	31
10	48	23	46	36	59	49	31
11	63	24	42	37	67	50	41
12	52	25	56	38	79	51	32
13	50	26	67	39	80	52	41
Total ..	662	Total ..	642	Total ..	802	Total ..	763

City total, 1925—2,869.

SCARLET FEVER "RETURN" CASES, 1925.

Out of 2,265 discharges from Monsall Hospital, 86 gave rise to at least 86 "return" cases, a "return" case rate of 3·8. In addition, 22 others contracted the disease indirectly from a returned patient.

Table showing the interval between return home of hospital patients and onset of illness in "return" cases.

Days	0–6	7–13	14–20	21–27
No. of Cases	22	35	21	8

During the year 1924, 1,277 scarlet fever patients were discharged from Monsall Hospital, and 43 gave rise to at least 43 cases, a "return" case rate of 3·4 ; and in 1923, out of 1,580 discharges, 72 gave rise to at least 72 cases, a "return" case rate of 4·5.

"Dick" Test.—The possibilities of the use of the "Dick" test in scarlet fever have been explored, and this work is referred to on page 126 by the Superintendent of Monsall Hospital.

Consultations.—Eighty-seven consultation visits were made during the year by Medical Officers of the Department at the request of medical practitioners in the City in connection with the diagnosis of cases of infectious disease in which the nature of the illness was in doubt.

DIPHTHERIA.

The usual tables for this disease are given below.

The following table shows the number of cases notified each year for the last ten years :—

1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
614	581	518	471	914	1,002	806	536	570	1,040

TABLE I.

DIPHTHERIA, 1925.—ATTACKS IN WEEKS, ACCORDING TO DATE OF ONSET.

FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
Week of Year	1925	Week of Year	1925	Week of Year	1925	Week of Year	1925
1	19	14	9	27	27	40	26
2	16	15	13	28	26	41	36
3	15	16	14	29	25	42	28
4	13	17	10	30	23	43	16
5	16	18	19	31	18	44	22
6	17	19	14	32	14	45	34
7	23	20	10	33	16	46	35
8	15	21	12	34	17	47	22
9	15	22	15	35	32	48	25
10	13	23	17	36	21	49	29
11	17	24	21	37	24	50	21
12	13	25	26	38	13	51	23
13	15	26	27	39	25	52	28
Total ..	207	Total ..	207	Total ..	281	Total ..	345

CITY TOTAL, 1925—1,040.

The following table shows that the number of attacks is highest in children up to 10 years.

TABLE II.

DIPHTHERIA.—NUMBER OF ATTACKS, OF DEATHS, AND CASE FATALITY AT DIFFERENT AGES FOR THE THIRTY-FOUR YEARS, 1891-1924, AND FOR 1925.

Ages	1891-1924			1925		
	Attacks	Deaths	*Case Fatality	Attacks	Deaths	*Case Fatality %
Under 1 year	413	248	60·0	20	4	20·0
1 to 2 years.. ..	1147	546	47·6	46	10	21·7
2 to 3 ,, ...	1514	497	32·2	61	10	16·4
3 to 4 ,, ...	1844	478	25·9	79	10	12·7
4 to 5 ,, ...	1917	425	22·2	104	15	14·4
5 to 6 ,, ...	1845	343	18·6	144	17	11·8
6 to 7 ,, ...	1463	210	14·4	95	7	7·4
7 to 8 ,, ...	1146	137	12·0	76	1	1·3
8 to 9 ,, ...	943	104	11·0	58	5	8·6
9 to 10 ,, ...	705	67	9·5	47	3	6·4
10 to 15 ,, ...	2052	113	5·5	167	4	2·4
15 to 20 ,, ...	873	37	4·2	63	2	3·2
20 to 25 ,, ...	601	17	2·8	38	1	2·6
25 to 35 ,, ...	797	23	2·9	26	—	—
35 to 45 ,, ...	343	6	1·7	6	1	16·7
45 and over	153	12	7·8	10	1	10·0
All ages	17756	3263	18·4	1040	91	8·8

* The percentages in this column are the actual proportions of fatal cases to the attacks at those ages.

The comparison of the case fatality of 1925 (8·8) with that for the 34 previous years is matter for satisfaction.

The case fatality at all ages since 1906 has been as follows :—

1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
21·1	20·4	21·8	17·9	19·9	16·5	20·0	14·9	14·3	18·8

1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
11·7	10·8	10·8	9·1	7·3	8·7	9·8	9·5	9·3	8·8

From the following table we see that the apparent incidence of the disease was greatest in the wards of Blackley, Exchange, New Cross, Newton Heath, and Ardwick. The percentage of removals is 80·8. The disease is one which yields good results to isolation and care in removing infection.

TABLE III.

DIPHTHERIA, 1925.—ATTACKS IN WARDS, WITH ATTACK RATE, CASE FATALITY PER CENT., AND REMOVALS TO HOSPITAL PER CENT.

Wards	Attacks	Deaths	Attack Rate per 1000 Living	† Case Fatality per cent.	Removals to Hospital per cent.
City	**1040**	**91**	**1·4**	**8·8**	**80·8**
All Saints	36	4	1·4	11·1	83·3
Ardwick	60	2	2·0	3·4	95·0
Beswick	20	5	0·6	25·0	75·0
Blackley	86	10	4·4	11·6	91·8
Bradford	30	2	1·1	6·7	73·3
Cheetham	31	4	1·2	12·9	61·3
Chorlton-cum-Hardy	43	5	1·3	11·6	34·9
Collegiate Church	26	6	1·3	23·1	92·3
Collyhurst	48	1	1·8	2·1	70·8
Crumpsall	1	—	0·1	—	—
Didsbury	11	—	0·8	—	90·9
Exchange	2	—	3·5	—	100·0
Gorton North	27	3	1·0	11·1	81·5
Gorton South	21	—	0·8	—	76·1
Harpurhey	50	7	1·9	14·0	76·0
Levenshulme	19	—	0·9	—	52·6
Longsight	9	—	0·4	—	77·8
Medlock Street	58	7	1·7	12·1	87·9
Miles Platting	42	—	1·5	—	95·2
Moston	11	2	0·5	18·2	54·6
Moss Side East	21	—	0·9	—	71·4
Moss Side West	23	—	1·0	—	69·6
New Cross	76	5	2·6	6·6	93·4
Newton Heath	43	2	2·1	4·6	97·7
Openshaw	21	1	0·8	4·8	85·7
Oxford	2	—	1·3	—	100·0
Rusholme	22	2	1·1	9·1	59·9
St. Ann's	—	—	—	—	—
St. Clement's	9	1	1·3	11·1	100·0
St. George's	56	8	1·8	14·3	83·9
St. John's	5	—	0·8	—	100·0
St. Luke's	47	8	1·6	17·0	80·8
St. Mark's	40	4	1·3	10·0	80·0
St. Michael's	24	1	1·2	4·2	87·5
Withington	20	1	1·2	5·0	75·0

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† Corrected; the fatal cases are those actually occurring amongst the cases notified.

TABLE IV.

DIPHTHERIA MORTALITY, 1925.—RATE PER 1,000 LIVING COMPARED WITH MEAN OF FIVE YEARS.

	1920	1921	1922	1923	1924	Mean	1925
England and Wales.......	0·15	0·12	0·11	0·07	0·06	**0·10**	0·07
105 Great Towns.........	0·16	0·15	0·13	0·09	0·08	**0·12**	0·09
London	0·22	0·25	0·25	0·13	0·12	**0·19**	0·11
Manchester City.......	0·09	0·12	0·11	0·06	0·08	**0·09**	0·13
157 Smaller Towns	0·14	0·11	0·09	0·06	0·06	**0·09**	0·06

EXAMINATION OF "CONTACTS."

So far as was practicable, swabs were taken from the throats and noses of members of each family under 14 years of age in which there had occurred a positive case of diphtheria.

In all, 986 persons were swabbed, and 56, or 5·7 per cent., were found to be harbouring the diphtheria bacillus.

With a few exceptions, these were admitted to Monsall Hospital, and kept under observation until three successive swabs proved negative.

SUPPLY OF ANTITOXIN.

Diphtheria antitoxin (in phials containing 8,000 units concentrated) is supplied free to all medical practitioners in the City, and may be obtained by them at any time during office hours from the Public Health Office or from the district police stations at any time during the day or night. The total quantity supplied in this manner was 5,360,000 units (or 670 phials), at a cost of £264.

"SCHICK" TEST.

The "Schick" test is a simple means of gauging the susceptibility of individuals to diphtheria infection. The knowledge thus gained enables subsequent immunization of susceptible persons to be carried out. The value of this procedure has been proved in this and other countries. At Monsall Hospital a considerable amount of work has been done on these lines with successful results, and it is now the practice to test and immunize all members of the nursing staff employed at the hospital. The extended application of these methods would materially increase control over the disease, and the measures to be taken towards this end are under consideration.

VIRULENCE TESTS.

The value of testing the virulence of diphtheria bacilli in certain cases lies in the fact that in the past harbourers of the bacillus have been kept in isolation, sometimes for long periods, irrespective of whether or not the organisms present were virulent. In cases where the test is negative the organisms are incapable of provoking disease, and isolation of the individual is unnecessary and uneconomic.

Table V. shows that during the year virulence tests were carried out in 66 cases, with 55 positive and 11 negative results.

TABLE V.

VIRULENCE TESTS, 1925.

Nature of case	Number in which diphtheria bacilli were present	Result of test	
		Virulent	Non-virulent
"Diphtheria Contacts" ..	23	19	4
Scarlet Fever Patients ..	14	12	2
Persons with Rhinitis ..	7	7	0
Other Cases..	22	17	5
Total	66	55	11

* ENTERIC FEVER.

The number of cases of enteric fever occurring during 1925 was 65.

Table I. shows the attack and death-rates compared with those for England and Wales since 1908.

TABLE I.

INCIDENCE OF AND DEATH-RATE FROM ENTERIC FEVER IN MANCHESTER.

Number of Notified Cases, Deaths, and Death-rates per 1,000 *living from Enteric Fever in each of Eighteen successive Years.*

YEAR	1908	1909	1910	1911	1912	1913	1914	1915	1916
No. of cases notified	393	369	358	256	242	292	156	174	78
No. of deaths.	75	71	62	46	43	47	34	46	22
Death-rate — Manchester	0·11	0·13	0·09	0·07	0·06	0·06	0·05	0·06	0·03
Death-rate — England and Wales...	0·07	0·06	0·05	0·07	0·04	0·04	0·05	0·04	0·03

YEAR	1917	1918	1919	1920	1921	1922	1923	1924	1925
No. of cases notified and accepted . .	86	68	90	54	74	36	50	103	65
No. of deaths	10	10	19	13	12	4	8	14	8
Death-rate — Manchester	0·01	0·01	0·02	0·02	0·02	0·01	0·01	0·02	0·01
Death-rate — England and Wales . .	0·03	0·03	0·01	0·01	0·02	0·01	0·01	0·01	0·01

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* Including typhoid and paratyphoid.

Table II. shows at what ages enteric fever appears to be most prevalent and also at what ages it is most fatal.

TABLE II.

ENTERIC FEVER.—NUMBER OF ATTACKS, OF DEATHS, AND CASE FATALITY PER CENT. AT DIFFERENT AGES FOR THE THIRTY-FIVE YEARS, 1891–1925.

Ages	1891–1925		
	Attacks	Deaths	Case Fatality Per cent.
Under one year	18	7	38·9
1 to 2 years	56	8	14·3
2 ,, 3 ,, ...	118	16	13·6
3 ,, 4 ,, ...	173	22	12·7
4 ,, 5 ,, ...	227	25	11·0
5 ,, 6 ,, ...	261	28	10·7
6 ,, 7 ,, ...	262	26	9·9
7 ,, 8 ,, ...	245	20	8·2
8 ,, 9 ,, ...	258	22	8·5
9 ,, 10 ,, ...	258	26	10·1
10 ,, 15 ,, ...	1,471	158	10·7
15 ,, 20 ,, ...	1,614	290	18·0
20 ,, 25 ,, ...	1,564	307	19·6
25 ,, 35 ,, ...	2,312	540	23·4
35 ,, 45 ,, ...	1,133	331	29·2
45 and over	785	263	33·5
All ages	10,755	2,089	19·4

TABLE III.

ENTERIC FEVER ATTACKS IN WEEKS REPORTED IN 1925, ACCORDING TO DATE OF ONSET.

FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
Week of Year	1925	Week of Year	1925	Week of Year	1925	Week of Year	1925
1	1	14	2	27	3	40	2
2	1	15	1	28	1	41	—
3	2	16	2	29	1	42	—
4	4	17	1	30	—	43	1
5	5	18	1	31	1	44	—
6	7	19	1	32	1	45	2
7	4	20	—	33	1	46	—
8	2	21	—	34	2	47	1
9	2	22	—	35	3	48	—
10	—	23	2	36	—	49	—
11	—	24	2	37	—	50	2
12	—	25	1	38	1	51	—
13	—	26	—	39	1	52	1
Total ..	28	Total ..	13	Total ..	15	Total ..	9

City total, 1925—65.

TABLE IV.

ENTERIC FEVER MORTALITY, 1925.—RATE PER 1,000 LIVING, COMPARED WITH MEAN OF FIVE YEARS.

	1920	1921	1922	1923	1924	Mean	1925
England and Wales... ..	0·01	0·02	0·01	0·01	0·01	**0·01**	0·01
London	0·01	0·01	0·01	0·01	0·01	**0·01**	0·01
CITY OF MANCHESTER.. ..	0·02	0·02	0·01	0·01	0·02	**0·02**	0·01

The number of cases of enteric fever occurring annually since 1908 is given in Table I. Over this period the downward trend of incidence has, on the whole, been maintained. The increase in 1924 is accounted for by the occurrence of 49 cases of paratyphoid B, an infection which was unduly prevalent that year not only in Manchester but throughout the country generally.

In 1925, 40 cases of typhoid and 25 of paratyphoid B were recorded, and there occurred 8 deaths from these diseases.

Source of Infection.

Of the typhoid cases, 6 were due to direct infection ; 4 were infected outside the City ; and 5 others had eaten raw mussels at a time prior to the onset of illness compatible with infection being derived from them. In 25 the origin of infection was undetermined.

As regards paratyphoid, 17 of the 25 cases occurred in one institution, where the infection was introduced by the admission of an unrecognised case, and subsequently spread by personal contact. Prompt action by the medical staff limited the outbreak to a single ward. The bacteriological investigation was carried out by the pathologist attached to the institution, and included the examination of all possible contacts and of the whole nursing staff. The examinations revealed several potential causes of spread, and resulted in immediate and complete control of the outbreak.

Examination of Contacts.

Medical practitioners were requested to submit blood specimens from all household contacts. Of 81 specimens obtained, 7 gave a positive Widal reaction. Two of these were from persons who proved to be suffering from typhoid ; 3 were from persons in apparent health, whose blood reaction could be explained by previous inoculation ; 2 were from uninoculated persons who showed no signs of illness. Stools and urine from the latter were examined with negative results.

" Typhoid Carriers."

Two known carriers have been under observation for the last three years. One of these, F42, has apparently become free ; the other, M40, continues to excrete typhoid organisms. No spread of infection has been traced to them.

BACTERIOLOGICAL EXAMINATIONS MADE FOR THE COUNTY BOROUGH OF MANCHESTER DURING THE YEAR 1925, PUBLIC HEALTH LABORATORY, UNIVERSITY OF MANCHESTER.

Month	Diphtheria			Typhoid	Tuberculosis						Water	
					Sputum			Milk			Bacterio-logical	Chemica
	+	—	Total	Total	+	—	Total	+	—	Total	Total	Total
January	42	458	500	19	32	140	172	9	53	62	—	—
February	43	478	521	15	24	125	149	3	48	51	—	—
March	59	390	449	23	33	112	145	2	51	53	—	—
April...	53	384	437	18	33	120	153	2	21	23	—	—
May	46	467	513	31	37	124	161	4	44	48	—	—
June...	50	297	347	10	19	92	111	—	32	32	—	—
July	80	522	602	14	36	106	142	5	21	26	—	—
August	68	577	645	34	27	107	134	—	15	15	2	—
September ...	52	497	549	30	23	107	130	7	28	35	—	—
October	87	582	669	14	23	126	149	2	39	41	—	—
November ...	81	503	584	17	14	100	114	1	27	28	—	—
December ...	76	436	512	12	15	110	125	—	10	10	—	—
Total	737	5591	6328	237	316	1369	1685	35	389	424	2	—

Total specimens enumerated above—8,676. Other investigations 632, as under :—

Milks—Coli, etc.	477
Chemical examination	14
For dirt only	5
Fæces and urine for typhoid, tuberculosis, dysentery, etc.	39
Sputum	2
Cerebro-spinal fluid..	11
Diphtheria virulence tests	69
Shaving brushes, for anthrax	5
Food poisoning..	7
Blood, for malaria	1
Brain—Encephalitis lethargica	1
Typhoid culture	1
Total	632

CEREBRO-SPINAL FEVER.

Nine cases of cerebro-spinal fever were notified in 1925, the diagnosis being confirmed in each case by the presence of the meningococcus in the cerebro-spinal fluid. The age and sex of those affected and the dates of onset of illness were as follows :—

Sex	Age	Onset	Sex	Age	Onset
F	$\frac{8}{12}$	January 4th	M	3	April 17th
F	17	,, 22nd	M	$\frac{8}{12}$	May 9th
F	8	,, 7th	F	5	July 14th
M	41	,, 21st	F	3	,, 4th
F	$1\frac{6}{12}$	March 3rd			

POLIOMYELITIS.

Particulars of notified cases of poliomyelitis for 1925 are given in the following table :—

Case	Sex	Age	Ward	Onset	Notified	Paralysis	Result—Jan. 1926
1	M	8	Medlock St..	Jan. 21	Jan. 21	Both feet	Recovered
2	F	30	All Saints ...	Oct., 1924	May 25	?	Admitted from an address outside the City
3	M	3	Beswick ...	April 12	July 15	Left leg and left arm	Recovered
4	M	5	Blackley ...	July 22	July 29	Right arm	Permanent paralysis
5	F	4	St. Clement's	July 21	Aug. 8	Left leg	Slight paralysis
6	M	3	Withington...	Aug. 27	Sept. 8	Both arms	Slight paralysis
7	F	13	Levenshulme	Aug. 31	Sept. 9	Right leg	Permanent paralysis
8	M	5	Longsight ...	Sept. 1	Sept. 16	Both legs	Permanent paralysis
9	M	$3\frac{6}{12}$	Newton H.	Aug. 21	Aug. 28	Both legs and arms	Permanent paralysis
10	M	6	Cheetham ...	Oct. 30	Nov. 2	Arms and legs	Recovered
11	F	2	St. Mark's ...	Nov. 2	Nov. 9	?	Died Nov. 5th
12	F	$\frac{9}{12}$	St. Mark's ...	Nov. 5	Nov. 10	?	Died Nov. 8th

ENCEPHALITIS LETHARGICA.

Encephalitis lethargica was made a notifiable disease on January 1st, 1919. The incidence in Manchester during the past 7 years is shown in Table VI., and it will be noted that in the winter of 1923-24, the prevalence assumed serious epidemic proportions.

Investigation has been made in Manchester into the relation between encephalitis lethargica, influenza, and epidemic hiccup. As regards influenza, it has been concluded that the two diseases are not directly associated, and as regards epidemic hiccup close enquiry produced no evidence in support of the theory that the two affections are related one to the other.

Encephalitis lethargica has been widespread over the City, and only exceptionally, as detailed in the Annual Reports for 1923-24, has any connection between individual cases been established. The disease occurs amongst persons in all occupations. The social status of those attacked is indicated in Tables III. and IV., and it would appear that a crowded environment has an unfavourable effect upon the incidence.

There are occasions when considerable difficulty is experienced in the diagnosis, and it is certain that in a number of cases the disease escapes recognition altogether. Table V. gives a list of cases in which the original diagnosis was subsequently amended.

The age incidence of attacks and the mortality in age groups are shown in Tables I. and II. The after history of encephalitis lethargica patients, so far as it has been ascertained, is given in Table VI., which was compiled at the request of the Ministry of Health. It will be noted that of 427 patients, 131, or 30·7 per cent., died. Of 146 survivors who have been kept under observation, 38, or 26 per cent., are apparently well; 64, or 44 per cent., are partially incapacitated; and 42, or 29 per cent., are totally disabled.

The School Medical Officer had under observation on January 1st, 1926, 85 children who had been attacked by encephalitis lethargica at some previous period, and of these 42 were considered unfit for school.

ENCEPHALITIS LETHARGICA.

WEEKLY CASE INCIDENCE ACCORDING TO DATE OF ONSET OF ILLNESS.

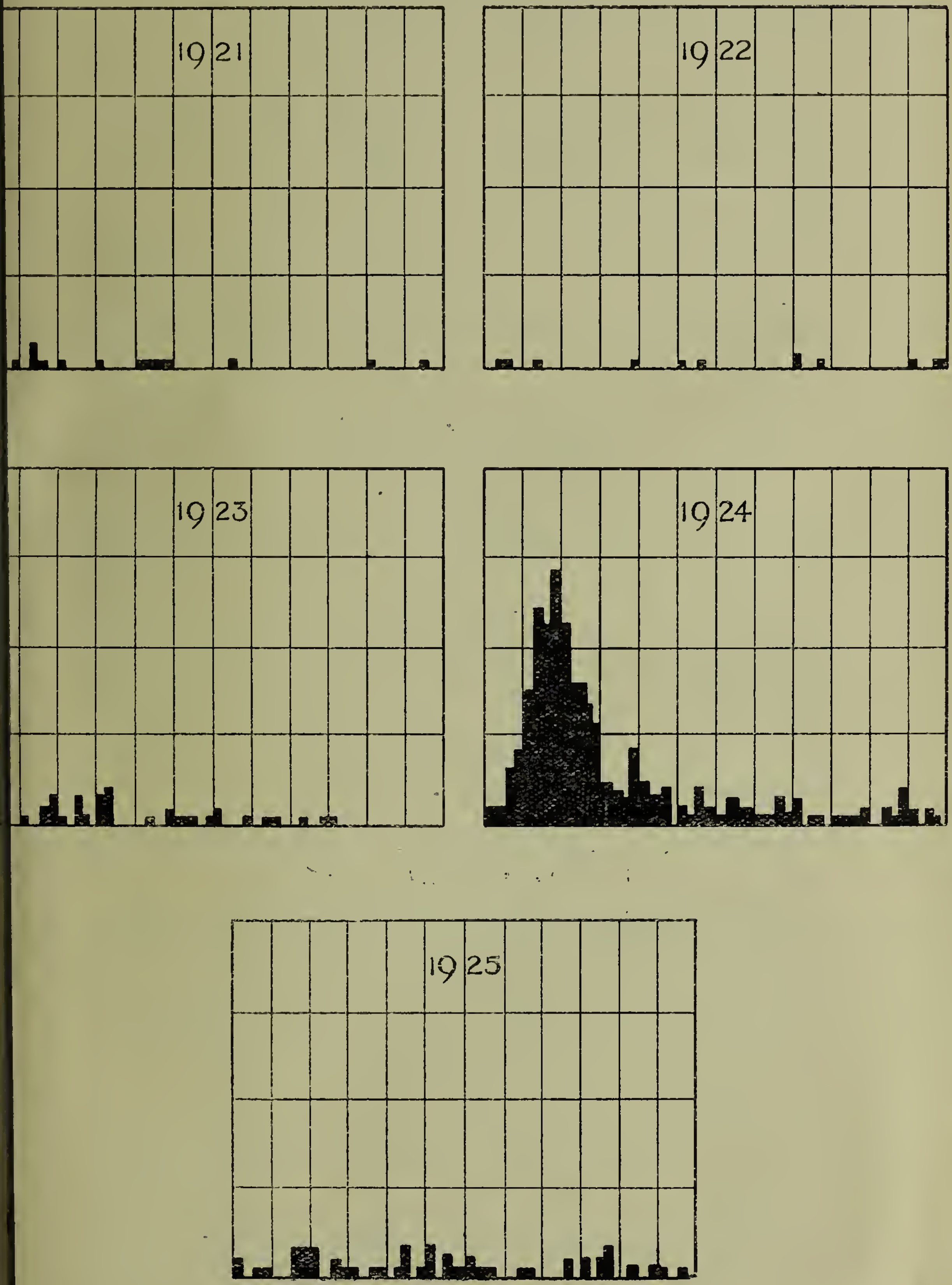

TABLE I.
ATTACKS IN AGE-GROUPS.
1921–25—403 CASES.

Years	0–5	5–10	10–20	20–30	30–40	40–50	50–60	60 and over	Total
Males	13	32	70	20	20	23	18	5	201
Females ..	9	19	60	45	26	20	14	9	202
Total.. ..	22	51	130	65	46	43	32	14	403

TABLE II.
MORTALITY IN AGE-GROUPS.
1921–25.

Age in Years	0–10	10–20	20–30	30–40	40–50	50–60	60 and over	All ages
No. of Cases	73	130	65	46	43	32	14	403
No. of Deaths ..	23	20	8	12	17	17	9	106
Mortality Rate ..	31·5	15·4	12·3	26·1	39·5	53·1	64·3	26·3

TABLE III.
NUMBER OF AFFECTED FAMILIES OCCUPYING THE INDICATED NUMBER OF ROOMS—390 CASES.

No. of Rooms	No. Families	Per Cent.	All Private Families. Census 1921
1–3	79	20·3	18·9 per cent.
4	160	41·0	40·5 ,,
5	79	20·3	21·2 ,,
6 and over	72	18·4	19·4 ,,

TABLE IV.

ACCOMMODATION PER INDIVIDUAL OF PERSONS LIVING IN INFECTED HOUSES, 1921–25—390 CASES.

Accommodation per individual	No. of persons living in infected dwellings	Per cent. of total number of persons living in infected dwellings	Percentage distribution of population. Census 1921
Under 0·3 rooms.	38	1·7	0·5
0·3 and under 0·5.	365	16·3	7·4
0·5 and under 0·7.	797	35·7	24·2
0·7 and under 1·0.	446	20·0	19·0
1·0 rooms and over	587	26·3	49·0

Total—2,233.

TABLE V.

AMENDED DIAGNOSIS IN 58 CASES NOTIFIED AS ENCEPHALITIS LETHARGICA.

	Cases		Cases
Meningitis—Tubercular	15	Influenza	6
„ Streptococcal ..	2	Broncho-pneumonia	6
„ Pneumococcal ..	1	Typhoid	1
„ Meningococcal ..	1	Tonsillitis	2
Cerebral hæmorrhage	4	Muscular Rheumatism	2
„ Thrombosis	1	Gastritis	3
„ Softening	4	Anæmia	2
„ Abscess	4	Epilepsy	1
„ Tumour	1	Chorea..	4
Cerebellar Abscess	1	Other	6
„ Tumour..	1		

TABLE VI.

FATE OF ENCEPHALITIS LETHARGICA PATIENTS.

(1) *Patients under the age of* 16 *at time of notification.*

Year	Total No. of cases notified	A	B		No. (among B) in whom changes of character have occurred	No. (among B) in whom "Parkinsonism" has supervened	C				D
		No. known to be alive and apparently well, Jan., 1925	No. suffering from sequelæ				No. of patients known to have died				No. of patients untraced or unvisited
			Interfering with schooling or other occupation	Preventing normal schooling or normal occupation			0–1 months after onset	2–6 months after onset	7–12 months after onset	Over 1 year after onset	
1919	10	1	—	—	—	—	6	3	—	—	—
1920	7	—	2	1	1	2	4	—	—	—	—
1921	9	3	2	—	1	—	4	—	—	—	—
1922	3	1	—	—	—	—	—	—	1	—	1
1923	12	2	6	1	4	3	3	—	—	—	—
1924	97	12	22	24	27	17	16	2	—	—	21
1925	19	—	—	—	—	—	5	—	—	—	14
(2) *Patients over the age of* 16 *at the time of notification.*											
1919	—	—	—	—	—	—	—	—	—	—	—
1920	12	—	2	1	—	3	5	3	—	1	—
1921	22	4	5	3	2	4	6	3	1	—	—
1922	6	1	1	—	—	1	—	2	1	—	1
1923	24	4	4	2	1	4	9	4	—	1	—
1924	147	10	20	10	4	14	18	13	2	2	70
1925	59	—	—	—	—	—	7	7	—	2	43

MEASLES AND GERMAN MEASLES.

(NOTIFIABLE IN JANUARY, 1916.)

The numbers notified were in the respective quarters of—

Diseases Notified	1925 1st quarter	2nd quarter	3rd quarter	4th quarter	Total
MEASLES—					
By Doctors	534	1,001	709	3,987	6,231
,, Others	213	301	224	972	1,710
Total	747	1,302	933	4,959	7,941
GERMAN MEASLES—					
By Doctors	138	1,125	396	123	1,782
,, Others	17	195	100	13	325
Total	155	1,320	496	136	2,107

The deaths from measles in successive years are shown in the following table:—

TABLE I.

DEATHS FROM MEASLES IN THE CITY OF MANCHESTER DURING THE TEN YEARS 1916–1925.

Years	Under One Year Under 3 Months	3-5 Months	6-11 Months	Years of Age 1-	2-	3-	4-	Total 5 Years and upwards	Total deaths at all ages
1916	3	2	37	80	28	12	8	9	179
1917	0	5	62	98	55	24	17	16	277
1918	0	2	38	55	26	21	13	11	166
1919	0	2	24	37	18	11	3	9	104
1920	0	8	45	67	39	17	15	19	210
1921	2	0	0	1	1	0	0	1	5
1922	1	6	83	159	65	13	10	17	354
1923	0	2	12	46	15	3	2	3	83
1924	2	5	63	168	62	25	28	17	370
1925	2	0	25	46	24	17	9	6	129

The deaths in quarters are given in Table 2 below.

It will be seen that the heaviest mortalities generally occur in the first and second quarters of the year, though one year differs greatly from another in this respect. In 1925 the greatest mortality occurred in the fourth quarter.

TABLE 2.—MEASLES, DEATHS IN QUARTERS.

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Whole Year
1901–1910 (mean)..	80	122	68	59	329
1911–1920 (mean)..	87	125	33	32	277
1921	1	2	0	2	5
1922	1	162	161	30	354
1923	13	42	21	7	83
1924	39	295	34	2	370
1925	17	27	8	77	129

In Table 3 is given a comparison of Manchester mortality with that occurring in other districts.

TABLE 3.—MEASLES MORTALITY RATES.—RATE PER 1,000 LIVING, COMPARED WITH MEAN OF FIVE YEARS.

	1920	1921	1922	1923	1924	Mean 1920-24	1925
England and Wales ..	0·19	0·06	0·15	0·14	0·12	0·13	0·13
105 Great Towns	0·22	0·08	0·22	0·15	0·18	0·17	0·17
London	0·22	0·05	0·35	0·08	0·29	0·20	0·08
CITY OF MANCHESTER ...	0·27	0·01	0·47	0·11	0·48	0·27	0·17
157 Smaller Towns......	0·19	0·05	0·10	0·19	0·08	0·12	0·15

The distribution of the deaths in wards shows that the death-rate was highest in Medlock Street, 1925 (0·44), followed by Openshaw (0·34), St. Mark's (0·34), Gorton North (0·03), Moss Side East (0·03), and New Cross (0·03).

The above table shows that in 1925 the death-rate from measles was in Manchester slightly higher than that for the country generally.

WHOOPING COUGH.

The cases of this disease notified are obtained entirely through the schools, and the same disabilities attach to this mode of notification as were experienced in measles. Notwithstanding, these notifications are useful. The cases are visited and dealt with by the Health Visitors in the same manner as cases of measles.

The highest death-rates in 1925 are, in Collyhurst (0·68), St. Michael's (0·68), St. Clement's (0·60), New Cross (0·47), Ardwick (0·46), and Miles Platting (0·44).

Whooping cough notifications during 1925 :—

	First quarter	Second quarter	Third quarter	Fourth quarter	Total
1925	1,442	1,225	440	226	3,333

TABLE I.

WHOOPING COUGH MORTALITY.—RATE PER 1,000 LIVING, COMPARED WITH MEAN OF FIVE YEARS.

	1920	1921	1922	1923	1924	Mean	1925
England and Wales	0·11	0·12	0·16	0·10	0·10	**0·12**	0·15
105 Great Towns	0·14	0·13	0·19	0·12	0·12	**0·14**	0·18
London	0·17	0·12	0·25	0·09	0·11	**0·15**	0·19
CITY OF MANCHESTER......	0·11	0·23	0·13	0·24	0·15	**0·17**	0·27
157 Smaller Towns........	0·10	0·11	0·15	0·10	0·09	**0·11**	0·14

TABLE 2.—WHOOPING COUGH, DEATHS IN QUARTERS.

Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Whole Year
1911-1920 (Mean)..	59	73	24	17	173
1921	40	78	31	20	169
1922	24	37	25	13	99
1923	48	113	12	11	184
1924	26	53	10	27	116
1925	89	81	23	13	206

WHOOPING COUGH.

This disease has, in Manchester, during the last 10 years, caused more deaths than scarlet fever and diphtheria together. The number of deaths certified as being due to whooping cough during this period was 1,577, compared with 384 deaths from scarlet fever and 656 deaths from diphtheria. (See table below.)

YEAR	WHOOPING COUGH		MEASLES		SCARLET FEVER		DIPHTHERIA	
	Known Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1916	†6,000	300	9,230	179	1,185	35	614	67
1917	†980	49	10,613	277	829	15	581	63
1918	5,738	330	8,448	166	779	21	518	58
1919	1,000	40	8,420	104	1,758	26	471	41
1920	2,290	84	10,635	210	3,829	46	914	67
1921	4,415	169	1,135	5	5,400	59	1,002	90
1922	2,160	99	19,659	354	3,618	55	806	79
1923	3,804	184	3,482	84	1,920	31	564	47
1924	1,706	116	18,349	370	1,784	33	570	53
1925	3,333	206	7,941	129	2,869	63	1,040	91
Total	31,426	1,577	97,912	1,878	23,971	384	7,080	656
Manchester—Case fatality rate per cent.	5·0		1·9		1·6		9·3	

† Estimate only, as figures not available for these years.

It should be pointed out that the estimated number of cases (31,426) occurring during the 10 years does not represent all the actual cases. Since this disease is not notifiable by medical practitioners, many cases escape our notice.

DIARRHŒA.

TABLE 1.—1925.—DIARRHŒA AND SIMPLE CHOLERA MORTALITY: DEATHS UNDER TWO YEARS OF AGE PER 1,000 BIRTHS, COMPARED WITH THE MEAN OF FIVE YEARS.

	1920	1921	1922	1923	1924	Mean	1925
England and Wales........	8·3	15·5	6·2	7·7	7·3	**9·0**	8·4
105 Great Towns	10·4	19·3	7·6	9·9	9·2	**11·3**	10·8
London	9·5	21·3	7·1	10·2	8·4	**11·3**	10·6
CITY OF MANCHESTER......	12·4	20·9	11·3	12·2	11·1	**13·6**	15·1
157 Smaller Towns........	7·8	15·6	5·6	6·4	6·2	**8·3**	7·6

The number of deaths in successive years, and their distribution in quarters of the year, are exhibited in the following figures :—

TABLE 2.—DIARRHŒA AND SIMPLE CHOLERA DEATHS IN QUARTERS, 1916–1925.

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
First Quarter	55	48	30	28	45	59	38	53	51	40
Second Quarter ..	48	30	31	27	54	59	59	45	51	38
Third Quarter ...	135	140	54	59	63	139	44	40	46	93
Fourth Quarter ..	75	61	32	56	88	130	50	64	63	56
	313	279	147	170	250	387	191	202	211	227

In 1925 the temperature was slightly above the average, whilst the rainfall was above the average, but lower than in 1924.

TABLE 3.

Third Quarter of the years	Mean Temperature	Rainfall, Inches	Humidity, per cent.	Diarrhœa and Simple Cholera Mortality. Annual Rate (third quarter) per 1,000 living
1891-1900 Mean	59°·2	9·9	76 %	4·04
1901-1910 Mean	59°·1	8·5	77 %	2·81
1911-1920 Mean	59°·4	9·6	78 %	1·32
1921	61°·4	6·8	75 %	0·75
1922	56°·1	13·1	80 %	0·24
1923	59°·6	12·0	83 %	0·21
1924	58°·4	10·9	79 %	0·24
1925	59°·5	10·1	77 %	0·49

DYSENTERY.

One case of dysentery was notified during the year. This case, an ex-serviceman, was notified by a medical practitioner, and was treated in hospital.

Two deaths from dysentery were certified which had not been previously notified. There was also one death from dysentery in a case which was notified in 1919.

During the year, of the 20 cases of dysentery and the 21 carriers which have become known to the department during the last 6 years, 13 cases of dysentery and 13 carriers have been visited every six months, and the health of the members of their families has been investigated. The investigation has not so far revealed any suspicious symptoms among the members of the patients' or carriers' families, or among their workmates. Seven of the 20 cases of dysentery, and 8 of the 21 carriers have removed out of Manchester. In each case where the address has been obtained, the Medical Officer of Health for the district has been informed.

Five-Yearly Summary.

The following statement shows the incidence and deaths from dysentery during the past five years, also the number of families of cases and carriers which have been kept under observation :—

Year	Cases Notified	Deaths during the year	Families visited during the year	
			Cases	Carriers
1921	8	2	15	20
1922	3	1	14	18
1923	2	2	15	15
1924	2	1	14	14
1925	1	3	13	13
	16	9	71	80

During the last 5 years there have been 2 deaths in children under 10 years in which the cause of death was dysentery. In one the illness commenced whilst the child was living in the country, and in the other, although the father was an ex-serviceman, and had suffered from dysentery in the army, examination of his blood and stools gave negative results. In addition to the two cases mentioned above, a man 43 years old, who had suffered from epilepsy for many years, died in the Royal Infirmary from dysentery in this country. The organism isolated was Flexner Y. The man had not been an inmate of any asylum or institution for the care of epileptics. The source of infection was not discovered.

These were the only cases of dysentery during the 5 years where the infection appeared to have been contracted in this country.

MALARIA.

There were 4 cases of malaria notified during 1925. All were notified by medical practitioners, and none of them had been notified previously.

Two cases were females who had contracted the disease when living abroad, and two were ex-servicemen who had served overseas and had received treatment in the army. One man became infected in China ; the other in Egypt.

The cases remained at home under the care of the family doctor, or attended the Ministry of Pensions Hospital as out-patients.

No case of malaria was notified in which there was any suspicion that the disease had been contracted in this country.

FIVE-YEARLY SUMMARY.

The following statement shows the incidence of, and deaths from, malaria during the past 5 years :—

Year	Cases Notified	Deaths	Cases Infected in England
1921	38	3	Nil
1922	19	4	Nil
1923	16	1	Nil
1924	3	1	Nil
1925	4	Nil	Nil
	80	9	Nil

TRENCH FEVER.

There were no cases of trench fever notified during the year.

The following statement shows the number of cases notified, and the number of deaths, during the last 5 years :—

Year	Cases Notified	Deaths
1921	1	Nil
1922	1	Nil
1923	Nil	Nil
1924	Nil	Nil
1925	Nil	Nil
	2	Nil

VENEREAL DISEASES.

The arrangements made for the diagnosis and treatment of venereal diseases in Manchester were described in detail in the Medical Officer of Health's report for 1920, and in subsequent years any extension or modification of the scheme has been mentioned.

Extent to which the Scheme has been Developed.

Approved Treatment Centres.

There are five Approved Treatment Centres in Manchester and one in Salford. At the Manchester centres 15 male and 19 female clinics are held each week. The days and hours of the clinics at the five centres are shown on page 54. Intermediate treatment for male and female patients is also given each week-day at St. Luke's Hospital from 10 a.m. to 5 p.m., and at St. Mary's Hospital, where females only are treated, this treatment is given on one night each week. In addition to these approved treatment centres, one pre-maternity clinic is held at two of the child welfare centres each week, where mothers and their babies suffering from venereal diseases are examined and receive treatment.

Auxiliary Centre for Females.

The auxiliary centre for females at Monsall Hospital is open daily for the intermediate treatment of women who are attending any of the venereal disease clinics in the City, or who may be sent direct to this centre for intermediate treatment by medical practitioners.

At the child welfare pre-maternity clinics during the year there were 76 new cases, and of these 38 were children. The total attendance at these two centres during the year was 978.

The attendance of female patients at the auxiliary centre at Monsall Hospital continued to be very satisfactory throughout the year. The 57 patients who received treatment at this centre attended on 2,391 occasions, an average of 41·9 attendances per case.

729 Sitz baths were given.

There were two cases which showed "ill effects" after injections of arsenobenzol compounds, the symptoms both being mild general arsenical dermatitis.

The attendance of patients at the clinics during 1925 has not been so regular as in the last four years (see Tables D and E). This in spite of the fact that during the last five years many letters have been sent to patients who had discontinued attending the clinics before their treatment was completed (see Table F).

MANCHESTER AND SALFORD APPROVED CENTRES FOR THE TREATMENT OF VENEREAL DISEASES, 1925.

ROYAL INFIRMARY, OXFORD ROAD, MANCHESTER	ANCOATS HOSPITAL, MILL STREET, ANCOATS, MANCHESTER	HOSPITAL FOR SKIN DISEASES, QUAY STREET, MANCHESTER	ST. LUKE'S HOSPITAL, DUKE STREET, LIVERPOOL ROAD, MANCHESTER
Skin Clinic— Thursday ...11 a.m. (females and children) Wednesday ...6 p.m. (males) *Genito-Urinary Clinic*— Wednesday ...11 a.m. (females and children) Thursday ...6 p.m. (males) *Skin and Genito-Urinary Clinic*— Monday... ...6 p.m. (males)	*Skin Diseases*— Wednesday ...11-30 a.m. (females) Wednesday and Saturday } 5-30 p.m. (males) *Genito-Urinary Diseases*— Wednesday ...11-30 a.m. (females) Wednesday and Saturday } 5-30 p.m. (males)	*Skin Clinic only*— Daily except Sunday— For men ...9-0 to 10-0 a.m. For women and children— 9-0 to 11-0 a.m.	Monday ... Tuesday ... Thursday ... Friday ... } 5 to 7 each evening (males and females) Wednesday ...5 to 7 p.m. (females only) Daily (Sundays excepted) for irrigation—10 a.m. to 5 p.m.
ST. MARY'S HOSPITAL, WHITWORTH STREET	**CHILD WELFARE CENTRES (Pre-maternity Clinics)**	**AUXILIARY CENTRE (Females) MONSALL HOSPITAL, NEWTON HEATH, MANCHESTER**	**SALFORD ROYAL HOSPITAL, CHAPEL STREET, SALFORD**
Females only— Monday ... Wednesday Thursday Friday ... } 9-0 to 10-30 a.m. Thursday ...5-0 to 7-0 p.m. Tuesdays ...Intermediate treatment by nurse, 7 to 8 p.m.	45, *Higher Ardwick*— Fridays ...9 to 11 a.m. 42, *Lower Moss Lane*— Thursdays...9 to 11 a.m.	Sunday ...10-30 a.m. to 12-30 p.m. Monday ...9-30 a.m. to 12 noon 4 to 8-30 p.m. Tuesday ...9-30 a.m. to 12-30 p.m. 2 to 5-30 p.m. Wednesday...9-30 a.m. to 12-30 p.m. 2 to 5-30 p.m. Thursday ...9-30 a.m. to 12-30 p.m. 2 to 5-30 p.m. Friday ...9-30 a.m. to 12 noon 4-30 to 8-30 p.m. Saturday ...9-30 a.m. to 1-30 p.m. The Centre is closed first Sunday in every month.	*Skin Department*— Monday ...12-0 noon (males and females) Wednesday...6-0 p.m. (females) 7-0 p.m. (males) *Special Genito-Urinary Clinic*— Tuesday ...12-0 noon } (males and Friday ...6-0 p.m. } females)

Table I. gives a general summary of the work done at the following Centres during the year:—

(1) The Manchester Royal Infirmary;
(2) Ancoats Hospital;
(3) The Manchester and Salford Hospital for Skin Diseases;
(4) St. Luke's Hospital;
(5) St. Mary's Hospital;
(6) Higher Ardwick Child Welfare Centre;
(7) Lower Moss Lane Child Welfare Centre; and
(8) The Auxiliary Centre for Females at Monsall Hospital (attendances only);

TABLE I.

	Syphilis		Soft Chancre		Gonorrhœa		Conditions other than Venereal		Total	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1. Number of cases which— (*a*) at the beginning of the year under report were under treatment or observation for	1,329	969	28	—	1,728	250	12	88	3,097	1,307
(*b*) had been marked off *in a previous year* as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report *suffering from the same infection*	38	23	—	—	34	14	1	2	73	39
Total—Items 1 (*a*) and 1 (*b*)	1,367	992	28	—	1,762	264	13	90	3,170	1,346
2 (*a*). Number of cases dealt with at the Treatment Centre during the year *for the first time*	813	447	72	—	1,209	220	655	398	2,749	1,065
Total—Items 1 (*a*), 1 (*b*), and 2 (*a*) ..	2,180	1,439	100	—	2,971	484	668	488	5,919	2,411
2 (*b*). Number of cases *included* in Item 2 (*a*) known to have received *previous treatment at other Centres* for the same infection ..	36	31	—	—	33	10	1	2	70	43
3. Number of cases which ceased to attend— (*a*) Before completing the first course of treatment for	296	171	—	—	675	121	4	39	975	331
(*b*) After one or more courses, but before completion of treatment for	144	91	—	—	—	—	—	—	144	91
(*c*) After completion of treatment, but before final tests as to cure of ..	153	102	—	—	282	36	—	—	435	138
4. Number of cases transferred to other Treatment Centres after treatment for..	85	46	—	—	69	12	1	4	155	62
5. Number of cases discharged after completion of treatment and observation for	111	80	89	—	260	50	289	129	749	259
6. Number of cases which, at the end of the year under report, were under treatment or observation for	1,390	949	11	—	1,634	262	23	103	3,058	1,314
Total—Items 3, 4, 5, and 6	2,180	1,439	100	—	2,920	481	317	275	5,517	2,195
7. Out-patient attendances— (*a*) For individual attention by the Medical Officer	15,144	10,405	255	—	14,467	3,190	1,378	1,691	31,244	15,286
(*b*) For intermediate treatment—*e.g.*, irrigation, dressings, etc.	1,140	—	2,267	—	13,652	3,846	—	138	17,059	3,984
Total attendances	16,280	10,405	2,522	—	28,119	7,036	1,378	1,829	48,303	19,270
8. Aggregate number of "In-patient days" of treatment given to persons who were suffering from	360	540	35	—	679	903	—	—	1,074	1,443

	For detection of			For Wassermann Reaction
	Spirochetes	Gonococci	Other Organisms	
9. Examinations of Pathological material:— (*a*) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre	156	4,006	—	1,699
(*b*) Specimens from persons attending at the Treatment Centre which were sent for examination to an approved laboratory..	—	18	—	1,863

The question of regular attendance at the clinics is mainly dependent upon the facilities for treatment offered at the clinics. Attendance is much better at well-appointed clinics which are open daily, and where intermediate treatment is given almost at any time, than at clinics with only two or three sessions per week and where there is no provision for intermediate treatment. This is clearly brought out below. The days and hours of these clinics are shown on page 54.

	Ancoats Hospital		Manchester Royal Infirmary		St. Luke's Hospital	
	Sy.	Gon.	Sy.	Gon.	Sy.	Gon.
Number of patients on the books of Clinic during 1925	953	862	1,422	1,370	325	1,027
Number of attendances at Clinics during the year	6,103	4,103	6,656	4,445	3,960	7,767
Number of attendances for intermediate treatment during the year	—	—	—	—	1,140	14,833
					5,100	22,600
Average attendance per patient.	6·4	4·7	4·6	3·2	15·6	22

The average attendance shown above is obviously understated, because many of the patients discontinue treatment for various reasons (see Table 1), and remain on the clinic's books until the end of the year. Again, there are many patients carried over from a previous year who have almost completed their full course of treatment and are due for discharge early in the year. These remarks apply equally to Table E. These factors, being common to all the clinics, the figures shown above are sufficiently accurate to allow of a comparison being made.

MODIFICATION AND EXTENSION OF PRESENT SCHEME.

The need for daily clinics with facilities for intermediate treatment at all times of the day has been felt for some time.

The desirability for the unification of clinical control and the provision of maternity beds for pregnant women suffering from venereal diseases are also matters which require attention in any new scheme. The reorganisation of the scheme is at present under consideration, but the difficulty experienced in finding a suitable site for the main clinic is delaying these necessary arrangements.

ARRANGEMENTS FOR EXAMINATION OF PATHOLOGICAL SPECIMENS.

Professor Topley, at the Public Health Laboratory of the University of Manchester, carries out the Wassermann reactions and the examination of discharges, etc., for the presence of the spirochaeta pallida and the gonococcus for all medical practitioners who wish to have their patients examined. At the Royal Infirmary the microscopical examination of discharges is conducted by a trained microscopist who attends during the clinic hours, but the Wassermann tests are sent to the Public Health Laboratory.

At St. Mary's Hospital and St. Luke's Hospital Professor Topley is responsible for the Wassermann tests, but at Ancoats Hospital and the Skin Hospital the hospital pathologist conducts all the pathological examinations.

Table II. shows the pathological work done during 1925.

MEDICAL PRACTITIONERS AND THE SCHEME.

All members of the medical profession in the City have been repeatedly advised of the facilities offered for the diagnosis and treatment of venereal diseases. In the circular which was sent out the arrangements under the Manchester scheme are given in detail under the following heads :—

(1). Provision of laboratory facilities for diagnosis.
(2). Treatment centres and clinics.
(3). Supply of arsenobenzol compounds.
(4). The auxiliary centre for females.
(5). Copies of forms of printed instructions to medical practitioners, patients, and the public generally.

The attendance of medical practitioners at the treatment clinics during the year was fairly good, as will be seen from the table below :——

Particulars	Manchester Royal Infirmary	Ancoats Hospital	Skin Hospital	St. Luke's Hospital	St. Mary's Hospital	Total
Number of Medical Practitioners attending Clinic	15	5	Nil	4	Nil	24
Number of attendances.	45	82	Nil	85	Nil	212

During the year one medical practitioner attended the course on venereal diseases arranged by the University of Manchester, and after attending the clinics was granted a certificate of proficiency.

At the end of 1925 there were 41 medical practitioners who were qualified to receive arsenobenzol compounds free of cost.

TABLE II.

VENEREAL DISEASES—PATHOLOGICAL WORK DONE DURING 1925.

	Wassermann Reaction					Gonococci					Spirochaetes				
	Positive	Negative	Doubtful	Unsatisfactory Specimens	Total Examined	Positive	Negative	Doubtful	Unsatisfactory Specimens	Total Examined	Positive	Negative	Doubtful	Unsatisfactory Specimens	Total Examined
A. Work done at the Public Health Laboratory (University Bacteriological Department) :—															
Medical Practitioners..	167	470	36	*4*	673	41	109	—	*2*	150	—	6	—	*1*	6
Institutions other than Approved Centres	84	472	22	*18*	578	11	29	—	—	40	—	—	—	—	—
St. Luke's Hospital	113	530	30	*3*	673	—	—	—	—	—	—	—	—	—	—
St. Mary's Hospital	59	201	10	*2*	270	1	3	—	—	4	—	—	—	—	—
Manchester Royal Infirmary	271	485	24	*1*	780	—	—	—	—	—	—	—	—	—	—
Two Maternity and Child Welfare Centres	43	96	8	*1*	147	—	25	—	*1*	25	—	—	—	—	—
Total work done at Public Health Laboratory	737	2,254	130	*29*	3,121	53	166	—	*3*	219	—	6	—	*1*	6
B. Work done by Hospital Pathologist :—															
Ancoats Hospital		Not	stated		1,012		Not	stated		900		Not	stated		1
Manchester and Salford Hospital for Skin Diseases		Not	stated		687	—	—	—	—	—		Not	stated		19
C. Work done by Clinical Pathologist at Clinics :—															
Manchester Royal Infirmary	—	—	—	—	—		Not	stated		843		Not	stated		60
St. Mary's Hospital	—	—	—	—	—		Not	stated		432	—	—	—	—	—
St. Luke's Hospital	—	—	—	—	—		Not	stated		1,806		Not	stated		70
Total of A, B, and C	—	—	—	—	4,820	—	—	—	—	4,200	—	—	—	—	156

During the year 1,117 doses of these drugs were issued to medical practitioners, being 81 less than in 1924.

The number of Manchester patients treated by private practitioners during 1925 was 171, the number discharged after a full course of treatment was 77, and the number under observation at the end of the year was 123.

For the collection of specimens for examination, outfits were issued by the Medical Officer of Health, as follows :—

(*a*) Tubes, etc., to collect material for Wassermann reactions.
(*b*) Glass slides, etc., to collect material for microscopic examination.

684 Wassermann and 186 microscopic outfits were issued to practitioners during the year, and in Table II. will be seen the result of the pathological work done in connection with this part of the scheme.

PUBLICITY.

As mentioned previously, medical practitioners have been notified by circular letter of all arrangements made, and at the same time copies of the various forms to be used were enclosed.

Posters giving the names and addresses of approved treatment centres, with the days and hours when clinics are held, are displayed in the public conveniences in the City.

The Venereal Diseases Propaganda Sub-Committee of the Public Health Committee continue to organise lectures and addresses. This work during the year consisted chiefly in extending its educational work by means of lectures and a cinematograph campaign.

The following addresses were given in Manchester :—

Medical.	Social.	Total.
52	34	86

Of these addresses, 18 were given in works and 68 to various social and other organisations. These lectures were attended by some 4,400 persons, and were apparently well appreciated.

In addition to the foregoing, during the early months of 1925 a three weeks' cinematograph publicity campaign was held in 14 of the public halls in the City. Thirty-one lectures and displays were given to (*a*) men, (*b*) women, and (*c*) mixed audiences. In this way some 10,000 people were reached, and it is noteworthy that the attendances increased with the progress of the campaign. The number of young men and women present at the meetings was especially gratifying, representing as they do the fathers and mothers of the future. The list of lecturers consisted of two medical men and three medical women, and three lay speakers who deliver addresses on these subjects. It should be noted that the number of lectures given is nearly double that of the preceding year. This is due to the fact that access to audiences formerly inaccessible to direct venereal disease propaganda has been gained by also offering subjects of a more general character, such as "Adolescence," "Recreation and Health," and "Social Hygiene."

VENEREAL DISEASE ACT, 1917.

No action has been taken under the above Act during the year.

To the above may be added a statement of the venereal disease work done at Crumpsall Infirmary under the Poor Law Venereal Diseases Scheme; also a summary of the venereal disease work done in His Majesty's Prison, Strangeways, Manchester.

EXTRACT FROM A REPORT ON THE WORK DONE AT THE VENEREAL DEPARTMENT OF THE CRUMPSALL INFIRMARY (MANCHESTER UNION) DURING THE YEAR ENDED DECEMBER 31ST, 1925.

The Medical Officer of the Crumpsall Infirmary reports that the work of the Venereal Department has again increased during the year.

ADMISSIONS.

Total Admissions.

	Syphilis	Soft Chancre	Gonorrhœa
Males	134	6	98
Females	151	—	51
	285	6	149

Admission of Patients from other Unions (included in above figures).

	Syphilis	Soft Chancre	Gonorrhœa
Males	33	2	27
Females	39	—	9
	72	2	36

There were 20 births in this department of the Infirmary during the year

Persons Treated with Approved Salvarsan Substitutes.

	Manchester Union	Other Unions
Total number—Males	102	28
Females	102	44
	204	72

The total number of injections of arsenobenzol compounds was 890 in 1925.

Pathological Examinations.

(*a*) The number of Wassermann examinations carried out totalled 346; and examinations for detection of gonococci 176.

There were no still births or abortions during the year.

SUMMARY OF WORK DONE IN CONNECTION WITH VENEREAL DISEASE IN HIS MAJESTY'S PRISON, STRANGEWAYS, MANCHESTER, DURING THE YEAR 1925.

The total number of persons treated for syphilis during 1925 was:—

Males.	Females.	Total.
80	25	105

Approximately 75 per cent. of the above patients were stated to have come from Manchester.

The total number of doses of Salvarsan substitutes administered was 546, of which 243 doses were supplied by the Manchester Corporation.

The total number of persons treated for gonorrhœa was:—

Males.	Females.	Total.
71	3	74

VENEREAL DISEASES.

Summary of Five Years' Work.

In Table A is shown the general progress of the work at the five approved treatment centres and at the two child welfare centres.

From 1921 until 1924 there was a gradual falling off in the number of new cases, but in 1925 the number showed a tendency to rise a little, most noticeable in the syphilis patients. The attendances at the clinics are not being maintained as well as they might be, and are rather disappointing (Table B). The intermediate treatment facilities at St. Luke's Hospital are appreciated by the patients attending that clinic (Table B).

The following up of patients who have discontinued attending the clinics before completing their treatment is carried out by means of letters sent out by the Medical Officers in charge of the centres, and Table C is a summary of the results obtained during the last five years.

TABLE B.

(*a*) Number of cases attending the Clinic during each year.

(*b*) Total attendances at Clinic each year.

(*c*) Total attendances for intermediate treatment each year.

(*d*) Average attendance per case each year.

		Syphilis		Soft Chancre		Gonorrhœa		Non-Venereal Disease	
1921	(*a*) ...	4,254		216		3,233		1,224	
	(*b*) ...	38,251	3,867	590	1,404	17,921	30,247	2,581	2,581
	(*c*) ...	436		814		12,326		—	
	(*d*) ...	9		6·5		9·3		2	
1922	(*a*) ...	4,109		156		3,040		999	
	(*b*) ...	33,105	34,128	278	930	15,844	28,983	2,290	2,345
	(*c*) ...	1,023		652		13,139		55	
	(*d*) ...	8·3		5·9		8·2		2·2	
1923	(*a*) ...	3,793		117		2,977		1,205	
	(*b*) ...	29,362	30,091	280	2,878	17,041	31,085	2,706	2,835
	(*c*) ...	729		2,598		14,044		129	
	(*d*) ...	7·9		24·6		10·4		2·3	
1924	(*a*) ...	3,252		107		3,066		1,129	
	(*b*) ...	25,140	25,919	269	2,303	16,539	30,627	2,926	3,082
	(*c*) ...	779		2,034		14,088		156	
	(*d*) ...	7·9		21·5		10		2·7	
1925	(*a*) ...	3,619		100		3,455		1,156	
	(*b*) ...	25,549	26,689	255	2,522	17,657	32,764	3,069	3,207
	(*c*) ...	1,140		2,267		15,107		138	
	(*d*) ...	7·3		25·2		9·5		2·6	

TABLE A.—SHOWING THE PROGRESS OF THE WORK DONE AT THE FIVE APPROVED TREATMENT CENTRES AND AT THE TWO CHILD WELFARE CENTRES DURING THE FIVE YEARS 1921–1925.

Particulars	1921		1922		1923		1924		1925		Total for 5 Years	
NEW CASES (including cases which had returned after discontinuing attendance)	5,253		4,406		4,306		3,804		3,926		21,695	
Cases discharged after completion of treatment... ...	1,254		1,974		1,565		1,129		1,027		6,949	
Cases ceasing to attend Clinic—												
(*a*) Before completing first course of treatment...	1,508	2,699	809	2,497	1,056	2,144	1,175	1,955	1,309	2,388	5,857	11,683
(*b*) After completing one or more courses of treatment, but before completion of treatment	256		888		275		199		235		1,853	
(*c*) After completing treatment, but before final tests	615		558		514		327		573		2,587	
(*d*) Transferred to other Centres	320		242		299		254		271		1,386	
Total number of Attendances—												
At the Clinic	59,343	72,919	51,517	66,386	49,389	66,889	44,874	61,931	46,530	65,182	251,653	333,307
Intermediate Treatment	13,576		14,869		17,500		17,057		18,652		81,654	
In-patient Days	9,870		6,056		4,681		3,284		2,517		26,408	
Doses of Arsenobenzol Compounds given	10,425		9,544		8,607		7,589		8,098		44,263	

Particulars	1921			1922			1923			1924			1925			Total for 5 Years		
Pathological Examinations made—	Wass.	Spir.	Gon.	Wass.	Spir.	Gon.	Wass.	Spir.	Gon.	Wass.	Spir.	Gon.	Wass.	Spir.	Gon.	Wass.	Spir.	Gon.
(*a*) Centre	2,550	251	2,751	2,321	192	3,221	2,000	199	3,492	1,792	136	3,674	1,699	156	4,006	10,362	934	17,143
(*b*) Public Health Laboratory	2,983	3	39	2,497	3	52	2,325	3	28	2,009	—	136	1,868	—	18	11,677	9	273
	5,533	254	2,789	4,818	195	3,273	4,325	202	3,520	3,801	136	3,810	3,562	156	4,024	2,2039	943	17,416

TABLE C.

LETTERS SENT TO PATIENTS AT FIVE CLINICS REGARDING THEIR ATTENDANCES.

Year	1921	1922	1923	1924	1925	Totals for 5 years	
No. of letters sent	2,058	1,731	1,622	1,275	1,315	8,001	
Results.							Per cent.
1. No reply	1,027	809	799	665	732	4,032	50·4
2. Wrong addresses (letters returned)	29	99	51	52	41	272	3·4
3. Replied "under own doctor"	36	34	59	37	38	204	2·5
4. Replied "other causes for absence"	84	81	89	60	55	369	4·6
5. Returned and still attending	420	359	278	268	228	1,553	19·4
6. Returned for a period only	111	174	160	112	138	693	8·7
7. Returned and then transferred to other Centres	95	42	67	26	20	250	3·1
8. Returned and discharged	256	133	119	55	63	626	7·9
	2,058	1,731	1,622	1,275	1,315	8,001	

In Table D the new cases presenting themselves at the five approved treatment centres have been classified according to sex, and Manchester cases are shown separately from cases coming from outside districts.

TABLE D.—CLASSIFICATION OF NEW CASES ACCORDING TO SEX, YEARS 1921–1925.

(Child Welfare Centres not included in this Table.)

Syphilis and Gonorrhœa only.

Year	Manchester				Other Districts			
	Syphilis		Gonorrhœa		Syphilis		Gonorrhœa	
	M.	F.	M.	F.	M.	F.	M.	F.
1921 ...	844	502	1,080	164	495	297	437	63
	1,346		1,244		792		500	
1922	771	471	987	169	326	249	317	55
	1,242		1,156		575		372	
1923 ...	647	402	957	140	274	201	405	48
	1,049		1,097		475		453	
1924 ...	532	288	861	157	236	142	402	32
	820		1,018		378		434	
1925 ...	568	309	834	161	240	178	368	68
	877		995		418		436	
Total for 5 years	3,362	1,972	4,719	791	1,571	1,067	1,929	266
	5,334		5,510		2,638		2,195	

The excess of syphilis patients over gonorrhœa cases which was so marked in the earlier years of the scheme has given place to a balance in favour of gonorrhœa, which is generally accepted to be the more common complaint.

Among syphilis and gonorrhœa patients males present themselves for treatment in larger numbers than females. This is most pronounced in those suffering from gonorrhœa, and particularly those who come from districts outside Manchester.

REPORT OF WORK DONE UNDER THE RATS AND MICE (DESTRUCTION) ACT, 1919.

Under the provisions of the Rats and Mice (Destruction) Act, 1919, primary inspections have been made at 1,121 premises during the year. Of these, 314 were found not to be infested. General infestation was reported in 426 premises, and in 381 premises the infestation was confined to the yards and passages only.

1,100 revisits have been made during the progress of repressive measures.

Rat proofing and destruction have been carried out at 647 premises, and destructive measures only at 146 premises.

At the end of the year repressive measures were in progress at 178 premises.

As a result of systematic examination of rat-infested premises, drainage work has been carried out at 622 premises. At the end of the year drainage work was in progress at 120 premises, and in connection with 212 other premises notices to repair defective drains had been issued or were in course of preparation.

The Paving and Highways Department have, in conjunction with the Rat Executive Officer, made 54 examinations of undermined portions of streets and passages; and in 51 cases, where the undermining was found to be due to rats, remedial measures have been carried out. In all cases dealt with it has been sought as far as possible to secure collective action for the destruction of rats and mice.

The various departments of the Corporation have carried out rat destruction on lands and buildings under their control with the following results:—

48,926 poison baits and 79 tins of virus laid.

36,732 poison baits and 79 tins of virus taken.

30 dead rats were found and 1,400 rats were killed by other methods.

1,912 mice were destroyed.

Two firms of vermin exterminators have certified to the destruction by them of 10,606 rats upon lands and buildings in the City.

624 letters have been sent out during the year, chiefly to occupiers and owners, specifying work at rat-infested premises.

One rat week was held, which was advertised by public notice, advising occupiers of their responsibilities under the Act, and giving instructions as to the most effective methods to be adopted for the destruction of rats and mice.

Two notices under the Rats and Mice (Destruction) Act, 1919, have been served upon occupiers of infested premises. In one case a professional rat catcher has since been employed, and the work of rat destruction and proofing is proceeding. In the other case the notice has been complied with.

Classification of the Causes of Infestation by Rats.

Of the total number of rat-infested premises which have been examined during the year, 53 per cent. showed infestation of the interior of the building, and 47 per cent. showed infestation of yards and passages only.

In premises where the interior of the buildings were infested, the infestation was directly due to or associated with defective or disused drains or sewers in 29 per cent. of the cases. Where the infestation was confined to yards and passages it was found to be due to or associated with defective or disused drains in 91 per cent. of the cases.

In the remainder of the premises infested it was found that the infestation was due to other causes—*e.g.*, refuse dumps, improper storage of food and of waste materials attractive to rats, the nature of the business carried on, dilapidated premises, etc.

Nature of Premises Infested during 1925.

Particulars	Internal	Yards and Passages only
Hotels, restaurants, cafes, clubs, beerhouses, supper bars, tripe and fried fish shops...	14	7
Slaughter-houses, piggeries, farms, and stables	8	—
Butchers, greengrocers, fish and poultry dealers	21	5
Grain and provision warehouses, bakeries, grocers, and confectionery shops	18	12
Marine stores, rag stores, skin stores, bone and fat stores ...	10	—
Tips, vacant land, railway embankments, building estates, and allotments	8	—
Cloth, hosiery, and general warehouses, outfitters, drapers, furriers, milliners, hatters, waterproofs, laundries, chemists, tailors, costumiers, boots and shoes, leather goods	66	4
Engineering works, hardware, cabinet makers, furniture, boxmaking	9	1
Printers, stationers, fancy goods, hairdressers, tobacconists, etc.	22	2
Hospitals, colleges, churches, schools	4	1
Office premises	7	—
Miscellaneous	12	3
Dwelling-houses	227	346
Totals	426	381

Mr. W. A. Cartland was appointed Rat Executive Officer in November, Mr. I. Priestley having been appointed a Divisional Inspector.

Summary of Work carried out under the Rats and Mice (Destruction) Act, 1919, for the Five Years ending 31st December, 1925.

Particulars		1921	1922	1923	1924	1925
Primary Inspections...	Business Premises	448	516	582	396	326
	Dwelling-houses				1,036	795
	Totals	448	516	582	1,432	1,121
Results of Inspections	General Infestation ... ... Infestation—yards and passages only	344	401	451	607	413
	No evidence of Infestation ...	104	115	131	355	314
	Infested with mice	—	—	—	10	13
Re-visits		631	672	668	983	1,100
Premises at which repressive measures have been carried out		295	416	308	506	793
Premises where work was in progress at end of year		49	28	93	227	178
Premises where examination of drains by Sanitary Department have been necessary	Reports requested	28	14	11	59	40
	Premises involved	103	66	35	538	404
Examinations made by Paving and Highways Department in conjunction with the Rat Executive Officer		14	26	20	59	54
Rat Weeks held		1	1	1	1	1
Notices served under Rats and Mice (Destruction) Act, 1919		17	2	—	2	2
Prosecutions		2	—	—	—	—
Letters sent chiefly to Occupiers and Owners		180	412	414	615	624
Rat repression carried out by various Corporation Departments	Poison baits laid	69,207	56,004	42,279 and 100 tins Virus	36,725 and 189 tins Virus	48,926 baits and 179 tins Virus
	Poison baits taken	47,207	48,054	34,564 and 98 tins Virus	27,075 and 189 tins Virus	36,732 and 79 tins Virus
	Dead rats found...	398	19	22	4	30
	Rats killed by other methods ...	4,223	3,900	2,556	1,645	1,400
	Mice destroyed	—	—	478	324	1,912
Rats known to have been destroyed during the progress of work at a number of infested premises not included in above particulars		1,983	3,052	9,528	9,863	10,606

TUBERCULOSIS.

THE SENIOR TUBERCULOSIS OFFICER'S REPORT.

By DR. D. P. SUTHERLAND.

For the year 1925 the Annual Report in regard to tuberculosis is set out in the form suggested by the Ministry of Health for their quinquennial review, and follows the headings of Circular 648/1925.

From the beginning of the scheme in Manchester the two aspects of the work, namely, that concerned with the prevention of disease and that which is directed towards providing treatment for individual cases, have been carried on side by side. Great stress is laid upon those measures, which not only prevent the development of tuberculosis in individual patients, but also tend to prevent, so far as this is possible, the infection of other members of the general public. This policy is one that must necessarily be adopted in a disease like tuberculosis, which is definitely infective, and where the infectivity of the individual may last for years. It is this chronicity of the disease, together with its widespread incidence, that makes the treatment of tuberculosis so complicated and difficult a medical and social problem.

1. The Tuberculosis Offices of the Manchester Council and the Dispensary are adjacent buildings situated in Joddrell Street and Hardman Street, Deansgate.

The Medical staff is the following :—

Whole time	D. P. Sutherland, Senior Tuberculosis Officer and Deputy Administrative Tuberculosis Officer. F. Butterfield, Assistant Tuberculosis Officer. E. Ratner, Assistant Tuberculosis Officer. J. Holroyd, Assistant Tuberculosis Officer.
Part-time Consultants ..	Dr. N. C. Haring. Dr. R. W. Marsden. Dr. J. A. K. Renshaw.

The other staff of the Tuberculosis Office consists of 14 Investigation Officers and Tuberculosis Nurses and 20 Clerks.

It has been found increasingly difficult to carry out the work at the existing offices during the last few years. The district has become much more industrialised, and there is not the necessary quietness existing to enable careful examinations to be made without very frequent interruptions. As a consequence, examinations, which are already difficult and depend upon minute differences in auscultatory sounds, are in some cases rendered impossible for long periods of time. It is therefore urgently necessary that other accommodation should be found at an early date where examinations can be made under quieter and more satisfactory conditions.

2. The residential institutions belonging to the Local Authority are :—

(1) *Baguley Sanatorium.*

This institution receives adult cases at all stages of disease, the majority of cases being of an advanced type.

There are available 333 beds.

The staff consists of—

Medical Superintendent .. .. .. Dr. H. G. Trayer.
1st Assistant .. .. Dr. Elder.
2nd Assistant .. .. Dr. Coleman.
3rd Assistant .. .. Dr. Whiteside.

Matron, Nurses, and other staff, in-door and out-door, numbers 122.

(2) *Abergele Sanatorium.*

This sanatorium is intended for early cases of pulmonary tubercle in adults. There are also 10 beds reserved for surgical tubercle in children.

The total accommodation is 62 patients.

The staff consists of—

Medical Superintendent .. .. .. Dr. A. G. M. Grant.
Matron, Nurses, and other staff, in-door and out-door, numbers 39.

Beds are available also at the following institutions to the number required :—

Surgical tubercle
1. Manchester Royal Infirmary and Barnes Convalescent Home, Cheadle.
2. Ancoats Hospital and Great Warford Convalescent Home.

3. Skin Hospital, Deansgate.
4. Barrowmore Tuberculosis Colony.
5. Crossley Sanatorium, Delamere. The Corporation rent 77 beds for early pulmonary tuberculosis in adults.

3. Cases of tuberculosis attending the general and special hospitals are notified under the Tuberculosis Order to the Medical Officer of Health. In the case of sanatorium treatment being necessary, the arrangements for giving this treatment are made by the Tuberculosis Office.

In surgical cases the Corporation recommends patients to the Manchester Royal Infirmary or the Ancoats Hospital, and pays at an agreed rate for their maintenance. Similarly, for skin cases requiring operation at the Skin Hospital, and, in addition, this special institution receives payment for the out-patient treatment of all recommended Manchester cases.

The School Medical Officer is kept informed by weekly return of all cases of school age notified. Also a weekly return is sent to him of all removals, deaths, and recoveries.

Cases are sent from us to clinics as may be required.

4. Close co-operation exists between the medical practitioners and the Tuberculosis Officer. The practitioners send down cases freely for diagnoses and opinions, and in every instance a special report upon the clinical findings is sent by the consultant to the practitioner in charge of the case. In other instances consultations with practitioners take place if the practitioner so desires. Periodical reports from practitioners under the Domiciliary Order are received regularly, and when carefully filled up give valuable information to the Tuberculosis Officer. Whenever a case has been in an institution the medical practitioner to whose care the patient returns is sent a special report from the Medical Superintendent of the institution, giving a record of the progress of the patient whilst there, together with any special treatment that has been found desirable.

5. In cases where the diagnosis of tuberculosis is in doubt the patients are kept under observation at the Dispensary and are reported upon monthly until a diagnosis is established. Other cases who may be under Domiciliary treatment remain under that form of treatment but report frequently at the Dispensary for re-examination, the doctor, in addition, being consulted in every instance. Other cases, again, who are not able to attend are visited at their homes by members of the Tuberculosis staff. If the diagnosis of cases cannot be ascertained by these methods, then the patient is recommended for admission to one of the observation beds at a sanatorium, where they are under constant and continuous supervision, and a diagnosis is finally determined.

6. Every notified case upon visiting has its family record investigated, and it is the investigator's duty to see every member of the household if possible. If necessary, additional night visits are paid for this purpose. The completed history sheets are then submitted to the Tuberculosis Officer, who gives instructions regarding the examination at home or the Dispensary of any case for whom such a course seems to be necessary. During the subsequent periodical visits to the homes of the patients enquiries are made as to the health of the other members of the family, and any suspects who have been under supervision are specially reported upon.

A special register for contacts is kept in the office.

7. The special methods of diagnosis include primarily the examination of patients by specially skilled clinicians. This is by far the most important measure. Tuberculin, X-rays, sputum examination are other aids to the diagnosis. A certain number of cases are sent to the Sanatorium for observation there, and a report is required at the end of a month. The reaction to an anti-tuberculous regime may be the only evidence corroborative of an opinion formed as to presence of tuberculosis.

Special treatment, again, is that special for the disease. No effort is made to make the Dispensary a treatment centre, as this is not its main function.

Pneumothorax finds its place as a form of treatment for a limited number of cases. These are started at the Sanatoria and continued at the Dispensary.

The number of cases so far treated this way is 38.

The number now under treatment is 3.

A number of cases in whom pneumothorax treatment has been started have been discontinued for various reasons. Sometimes the establishment of a collapse was not possible, and in others, again, the patients themselves failed to continue their attendances.

The introduction of artificial sunlight treatment at the Skin Hospital has enabled a number of cases to be treated by this form of therapy. The type of lamp used is the open centre arc, and patients receive exposures varying in duration according to their requirements. 18 Manchester cases have been treated in this way since the installation was completed at the end of 1924, and there are at present under treatment 9 cases. The patients have reacted satisfactorily to the treatment, and although it is too soon yet to speak of the ultimate results, the immediate effects are favourable.

In this connection reference may also be made to the artificial sunlight lamp which has been installed at the Abergele Sanatorium. This is a Mercury Vapour Lamp, adapted for working upon a somewhat lower than normal voltage, and has been used for giving exposures to children undergoing treatment for surgical tuberculosis. It has enabled light treatment to be carried out on those days when the natural sunlight was not available, and it has been of value.

8. An anti-tuberculous regime, together with general instructions given in the institution, and carried out if possible after discharge, secure good results in reasonably early cases. Permanent improvement cannot be expected in the majority of the advanced cases coming before us. Each patient requires separate consideration, and may at one time be suitable for one detail of treatment which would be contraindicated at another period. It would serve no useful purpose to elaborate in this respect.

Broadly speaking, reliance is placed upon good and sufficient food, fresh air, carefully graduated exercise and work, education, the following up closely of all cases, and appropriate treatment for any symptoms or complications that may develop.

9. A dentist attends regularly at the Dispensary and also at the Sanatorium Extractions and fillings are done, and dentures provided if necessary.

10. A special nurse is detailed for clinical nursing of cases at home. This nurse is one of the Tuberculosis Officer's staff, and reports daily to him. She carries out the instructions of the medical practitioner in charge.

Extra nourishment is provided for cases recommended for it after special enquiry has been made into the whole circumstances and income of the family. Orders are only given for specified periods and for definite articles of diet. The cases are carefully reviewed at least monthly, and special administrative arrangements are made to prevent overlapping.

11. The arrangements for treating non-pulmonary tuberculosis are made with the Manchester Royal Infirmary, Ancoats Hospital, the Skin Hospital, and by the provision of 10 children's beds at Abergele.

Plans have been prepared and approved by the City Council and the Ministry of Health for a large extension in the treatment of both pulmonary and non-pulmonary tuberculosis in children. This takes the form of an extension upon a favourable site which exists at the present Sanatorium at Abergele in North Wales. The immediate provision to be made is for the treatment of 210 cases. A commencement of the work upon this extension has been made, but it will be some years before a complete hospital is ready for the admission of patients.

12. The application of the Manchester scheme for the after-care of tuberculous patients and their families is one of the functions of the Public Health Committee.

The Corporation itself makes a grant of £2,750 a year towards the assistance of patients' families where there is a case of tuberculosis, and a further grant of approximately £1,500 is made (mainly for patients themselves), fifty per cent. of this latter being contributed by the Corporation and 50 per cent. by the Government, so the total funds available for Care Work in Manchester amount to £4,250.

Grants specifying the amounts and kinds of foods are made for periods not exceeding one month's duration. The principal articles supplied are milk, fresh meat, margarine, and vegetables.

At the expiration of these periods the circumstances of the case are again reviewed by a special enquiry carried out by one of the Tuberculosis Staff of Visitors, and renewal of the grant follows if necessary.

Each case is considered separately and dealt with by one of the whole-time Medical Staff, who at the time of considering the case has before him the necessary particulars, clinical and other.

It is necessary to have power to make grants immediately to avoid delay, but all grants are sanctioned subsequently by the Committee.

A duplicate order is sent to the patient and tradesman supplying, and a close scrutiny is kept upon the quality of the nourishments, particularly in the case of milk.

In this work close collaboration is maintained with the Mutual Registration Council (a charity organisation committee) and other voluntary agencies in the City, so that abuse of the funds is practically eliminated and the possibility of imposition is negligible.

Information of necessitous cases is gathered mainly from the Corporation's staff of inspectors and visitors, who are in constant touch with the tuberculous population and their families. The Corporation also welcomes and receives information from medical men, the City League of Help, and various private sources.

The funds, of course, are only available for families of individuals where tuberculosis exists or has existed.

From this fund, also, grants of clothing, on loan, are made to enable necessitous patients to obtain the full benefit of sanatorium treatment.

In addition, beds and bedding are lent out to secure isolation of the patients at home. Bedfast cases are also supplied with sundry articles to secure the necessary sanitary measures.

13. The provision of employment for patients is very difficult. Cases are, however, to a limited extent taken by some of the Corporation Departments upon direct reference by the Tuberculosis Officer.

Barrowmore Colony absorbs a small number of suitable cases who, after a course of vocational training, are colonised, and take up their residence upon the estate. Since the Barrowmore scheme was started in 1921, 9 patients from Manchester have been dealt with in this way.

14. The use of shelters for patients in this area has been limited to one or two cases.

15. The incidence of Tuberculosis has been found to fall heaviest upon the following class of workers :—

Males	*Females*
Labourers	Domestic Service
Mechanics	Machinists
Clerks	Schoolgirls

For the year 1925 the death-rate from tuberculosis shows a slight rise, along with the general rate for the City, and this is likewise associated with an increased death-rate from respiratory diseases other than tuberculosis. So far as this latter disease is concerned the rise is not unexpected and has been found to occur also in certain other parts of the country. The conditions of life in Manchester in relation to increased poverty and the opportunities for extension of infection consequent upon the unsatisfactory housing conditions have their inevitable result. Any advance made in the treatment of the individual is apt to be offset by the general unfavourable circumstances existing in the City, and unless all conditions of this kind are working towards an improvement in health and resistance a disease like tuberculosis will not fail to take its added toll of victims each year. Attention has more than once been drawn to other unfavourable circumstances in our midst which affect the general morbidity of the population and their tendency to a condition of ill-health. Specially to be noted in this connection are the smoke nuisance, towards the abatement of which efforts are being particularly directed at the moment, and the problem of transportation of the workers. The conditions under which individuals have to travel to and from their work are unsatisfactory and dangerous to a degree. The facilities provided for the transportation of workers are far behind the requirements which modern knowledge and experience demand.

16. The whole scheme aims at the prevention of tuberculosis amongst the general population, together with the treatment of the individual. By means of isolation in infective cases and supervision in their homes by constant visits and re-visits by trained nurses and inspectors, and by the repeated education of the patients and their families, it is endeavoured to achieve the end referred to.

During the five years under review numerous circulars and memoranda have been issued by the Ministry of Health, affecting primarily the administration in detail of various matters arising in the activities in departments working tuberculosis schemes. Reference was made in the 1921 report to the Public Health Tuberculosis Act and Regulations of that year, when the provision of Sanatorium Benefit ceased to be a function of Insurance Committees and was taken over by the public authority.

Under the Public Health Act of 1925, amongst numerous other clauses, was incorporated one giving the power for compulsory removal of cases of pulmonary tuberculosis. This had already been conceded to the Corporation in a previous local act of Parliament.

Under the Public Health Regulations of July 31st, 1925, no person who is aware that he is suffering from tuberculosis of the respiratory tract shall enter upon any employment or occupation in connection with a dairy, which would involve the milking of cows, the treatment of milk, or the handling of vessels used for containing milk.

Steps have been taken to bring the provisions of this Order before the notice of all the inspectors, health visitors, and nurses who are engaged upon routine home visiting. They are instructed to report any case that comes to their notice where a person suffering from tuberculosis of the respiratory tract is engaged in work of the nature specified.

One instance has occurred where it has been necessary to restrain the individual from carrying out duties which involve the handling of raw milk, and compensation to the amount of £200 was paid to him under section 308 of the Public Health Act, 1875.

The method of disinfection by means of Esmarch's procedure, which had been in use throughout the department for many years, was superseded in December, 1925, by a process of formalin lamp disinfection. This has been found to be more speedy and economical than the method formerly in vogue.

The following table is incorporated at the request of the Ministry of Health.

Table X.—New Cases and Mortality during 1925.

Age Periods	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0	5	4	13	8	2	1	10	6
1	22	19	68	76	8	5	28	27
5	36	34	77	67	5	3	10	12
10	54	43	52	64	4	10	9	4
15	71	81	41	40	40	69	5	11
20	77	102	18	20	35	62	9	3
25	143	139	28	19	89	90	6	10
35	162	111	15	9	135	58	3	5
45	198	65	19	11	173	61	10	4
55	99	28	11	2	81	24	6	4
65 and upwards	26	12	1	6	29	13	1	1
Totals ..	893	638	343	322	601	396	97	87

The number of non-notified deaths from pulmonary tuberculosis was 27 = 2·4 per cent.

The number of non-notified deaths from non-pulmonary tuberculosis was 43 = 23·4 per cent.

The percentage of non-notified deaths from all forms of tuberculosis was therefore 5·9.

The above figures indicate that notification of pulmonary tuberculosis in the area is very complete.

Until the scheme has established its projected accommodation for surgical tuberculosis, the second figure above will necessarily remain higher than that for pulmonary tuberculosis, where provision is much more complete. Furthermore, 23 of the 43 cases were certified as cases of tubercular meningitis—these had a very short illness, as a rule, and diagnosis was often in some doubt during life.

Tables and Statistics for the Year 1925.

Insured cases applying for treatment :—

1914 ..	730	Males.
	321	Females.
1915 ..	572	Males.
	315	Females.
1916 ..	747	Males.
	316	Females.
1917 ..	728	Males.
	359	Females.
1918 ..	642	Males.
	261	Females.
1919 ..	630	Males.
	255	Females.
1920 ..	645	Males.
	250	Females.
1921 ..	615	Males.
	255	Females.
1922 ..	543	Males.
	265	Females.
1923 ..	539	Males.
	291	Females.
1924 ..	597	Males.
	371	Females.
1925 ..	610	Males.
	327	Females.

Cases of discharged soldiers referred for treatment—297.

Number of insured patients who had so far recovered that no active signs of disease were found—300.

Recoveries amongst uninsured cases—778.

Contacts examined at their homes and at the Dispensary—670 ; of these, definite signs of tuberculosis were found in 40, and in 204 further observation was required, as they were suspicious cases of tuberculosis.

Grants of food were made in 3,217 instances to 686 families, and 66 grants of clothing were supplied to 45 patients in Hospital and Sanatorium to enable them to derive full benefit from treatment.

Special visits to the number of 10,263 have been paid by the Tuberculosis Nurses and 1,489 visits by the Clinical Nurse who attends to domiciliary patients requiring surgical dressings and nursing care.

TABLE I.

NOTIFICATIONS—1925.

Age Periods	NOTIFICATIONS ON FORM A, ETC.												Total Notifications on Form A etc.	NOTIFICATIONS ON FORM B				Total Notifications on Form B	NOTIFICATIONS ON FORM C, ETC,	
	Number of Primary Notifications													Number of Primary Notifications					Poor Law Institutions	Sanatoria
	0–	1–	5–	10–	15–	20–	25–	35–	45–	55–	65–	Total Primary Notifications		Under 5	5–	10 to 15	Total Primary Notifications			
Pulmonary Males	4	22	34	54	71	77	142	159	192	96	25	876	1,070	—	2	—	2	4	243	736
,, Females	3	19	33	42	81	101	137	110	62	26	10	624	780	—	1	1	2	3	121	411
Non-Pulmonary Males	8	61	66	45	40	17	28	15	18	8	1	307	429	—	9	6	15	23	33	78
,, Females	5	67	61	55	39	20	16	9	9	2	6	289	375	1	3	7	11	21	34	62
Totals	20	169	194	196	231	215	323	293	281	132	42	2,096	2,654	1	15	14	30	51	431	1,287

NOTIFICATION OF TUBERCULOSIS.

TABLE 2.

PHTHISIS—NUMBER OF NEW CASES OF PULMONARY TUBERCULOSIS NOTIFIED DURING THE YEARS 1900 TO 1925.

Year	Poor-law Cases	Institutions	Private Practitioners	Total
(1) 1900*	578	455	540	1573
1901	625	373	341	1339
1902	667	305	303	1275
1903	556	550	251	1357
1904	512	440	250	1202
1905	527	588	291	1406
1906	565	510	304	1379
1907	634	646	310	1590
(2) 1908	659	498	346	1503
1909	681	542	384	1607
1910	543	760	356	1659
(3) 1911	517	897	423	1837
(4) 1912	488	947	969	2404
(5) 1913	345	717	1350	2412
1914	483	877	1304	2664
1915	279	740	1194	2213
1916	322	817	1410	2549
1917	470	716	1061	2247
1918	268	563	1015	1846
1919	208	538	845	1591
1920	206	629	672	1507
1921	257	632	722	1611
1922	233	567	656	1456
1923	239	546	659	1444
1924	223	555	731	1509
1925	262	496	746	1504
Total	11347	15904	17433	44684

* This table does not include 425 cases notified in 1899.

(1). Voluntary notification of Pulmonary Tuberculosis, Manchester scheme.

(2). Compulsory notification (Tuberculosis Regulations) from Poor Law institutions.

(3). Compulsory notification from voluntary institutions.

(4). Compulsory notification of Pulmonary Tuberculosis by all practitioners.

(5). Compulsory notification of all forms of Tuberculosis.

TABLE 3.

NEW CASES OF NON-PULMONARY TUBERCULOSIS NOTIFIED DURING THE YEARS 1913-1925, THE ORDER OF THE LOCAL GOVERNMENT BOARD TAKING EFFECT IN FEBRUARY, 1913. (MALES AND FEMALES.)

Year	Total	
	Males	Females
1913	759	714
1914	519	413
1915	422	415
1916	418	467
1917	433	449
1918	345	353
1919	206	228
1920	280	257
1921	295	281
1922	321	284
1923	350	380
1924	316	307
1925	322	300
Total	4,986	4,848

TABLE 4.

PRIMARY NOTIFICATIONS AND DEATHS FROM PULMONARY AND NON-PULMONARY TUBERCULOSIS, 1917-1925.

Pulmonary Tuberculosis	0–	1–	5–	10–	15–	20–	25–	35–	45–	55–	65–	Total	
												Notifications	Deaths
Notifications, 1917	12	65	152	166	194	185	410	432	335	181	104	2,236	
Deaths, ,, ...	4	20	20	42	110	109	189	273	237	121	71		1,196
Notifications, 1918	1	46	106	115	200	177	373	352	278	136	54	1,838	
Deaths, ,, ...	3	19	16	41	100	84	197	237	230	129	47		1,103
Notifications, 1919	2	44	118	120	169	154	280	324	214	112	53	1,590	
Deaths, ,, ...	2	14	19	26	88	92	162	212	195	100	41		951
Notifications, 1920	3	22	98	96	142	154	279	300	231	107	38	1,470	
Deaths, ,, ...	4	3	6	27	73	74	152	205	201	90	33		868
Notifications, 1921	10	39	104	99	137	168	317	302	263	113	46	1,598	
Deaths, ,, ...	4	16	7	18	110	102	160	232	200	83	35		967
Notifications, 1922	6	38	107	92	138	148	288	293	216	91	39	1,456	
Deaths, ,, ...	5	15	7	14	74	117	191	202	185	96	41		947
Notifications, 1923	3	23	103	84	159	160	294	273	207	106	32	1,444	
Deaths, ,, ...	3	12	8	18	96	117	181	190	193	82	31		931
Notifications, 1924	2	30	81	90	174	175	297	298	237	97	28	1,509	
Deaths, ,, ...	3	8	4	13	91	97	168	218	188	86	30		906
Notifications, 1925	7	41	70	97	152	178	279	269	254	122	35	1,504	
Deaths, ,, ...	3	13	8	14	109	97	179	193	234	105	42		997
Total notifications	46	348	939	959	1465	1499	2817	2843	2235	1065	429	14,645	
Total deaths	31	120	95	213	851	889	1579	1962	1863	892	371		8,866

Non-Pulmonary Tuberculosis	0–	1–	5–	10–	15–	20–	25–	35–	45–	55–	65–	Total	
												Notifications	Deaths
Notifications, 1917	32	186	172	169	103	49	62	39	29	21	17	879	
Deaths, ,, ...	49	111	50	42	27	14	25	18	6	9	8		359
Notifications, 1918	13	141	152	125	89	46	42	31	23	21	10	693	
Deaths, ,, ...	23	86	35	37	29	15	12	12	14	14	10		287
Notifications, 1919	23	75	86	74	63	21	31	23	19	10	6	431	
Deaths, ,, ...	24	66	27	34	22	16	12	11	15	6	4		237
Notifications, 1920	19	74	107	92	73	34	40	26	18	13	4	500	
Deaths, ,, ...	22	62	27	27	20	10	16	17	8	7	6		222
Notifications, 1921	16	91	129	97	69	40	43	21	16	15	8	545	
Deaths, ,, ...	20	61	33	31	36	15	20	18	12	5	1		252
Notifications, 1922	13	134	132	112	77	40	33	24	18	9	13	605	
Deaths, ,, ...	28	85	31	23	18	12	8	8	12	6	11		242
Notifications, 1923	18	124	163	136	86	58	49	41	29	21	5	730	
Deaths, ,, ...	26	55	23	20	24	17	11	15	16	7	7		221
Notifications, 1924	20	127	128	102	91	49	49	25	14	7	11	623	
Deaths, ,, ...	24	82	17	23	27	18	13	7	10	6	2		229
Notifications, 1925	13	129	139	113	79	37	44	24	27	10	7	622	
Deaths, ,, ...	16	55	22	13	16	12	16	8	14	10	2		184
Total notifications	167	1081	1208	1020	730	374	393	254	193	127	81	5,628	
Total deaths	232	663	265	250	219	129	133	114	107	70	51		2,233

Table 6.

TUBERCULOSIS (NON-PULMONARY).—PRIMARY CASES NOTIFIED DURING 1925.

Location of Disease	Age Groups																				Totals	
	0—		5—		10—		15—		20—		25—		35—		45—		55—		65—			
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Brain :—Tumour	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meninges	12	13	7	5	—	2	—	3	—	—	—	1	1	1	—	—	—	—	—	—	20	25
Hydrocephalus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Glands :—Cervical	13	20	29	30	16	31	11	20	6	8	9	4	2	3	3	2	2	—	—	2	91	120
Mesenteric	1	2	1	5	4	3	2	1	—	—	—	1	—	—	—	—	—	—	—	—	8	12
Axillary	—	—	—	—	—	2	1	—	—	1	—	—	—	—	—	—	—	—	—	—	1	3
Inguinal	2	—	—	—	—	2	—	—	1	—	—	—	—	—	—	—	—	—	—	—	3	2
Tuberculous Peritonitis	12	12	10	5	7	3	5	8	1	4	—	3	—	—	1	1	—	—	—	—	36	36
Tuberculosis of Abdomen	6	4	5	3	8	2	—	2	—	1	—	2	—	—	—	1	—	—	—	—	19	15
,, of Breast	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, of Intestines	2	1	1	—	—	3	—	—	1	1	—	—	—	1	—	—	—	—	—	—	4	6
Joints :—Spine	5	6	4	2	—	2	5	—	—	1	4	—	—	2	2	2	—	1	—	—	20	16
Hip	2	5	6	3	2	3	2	1	2	—	2	—	1	1	1	—	—	—	—	—	18	13
Elbow	—	—	1	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	1	—	3	1
Ankle	2	1	—	1	1	—	2	—	—	1	—	—	1	—	1	—	1	—	—	—	8	3
Wrist	1	—	1	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	4	—
Shoulder	—	—	—	—	—	—	2	—	—	—	1	—	—	—	—	—	—	—	—	—	3	—
Knee	—	3	4	2	—	2	—	—	—	—	—	—	1	—	—	—	1	—	—	—	6	7
Bones :—Various	6	2	3	2	5	3	5	2	1	—	1	1	3	—	3	—	—	—	—	2	27	12
Tuberculosis of Skin	1	1	3	4	8	4	2	2	2	3	6	2	2	1	2	2	—	1	—	2	26	22
General Tuberculosis	3	1	—	2	—	—	—	—	1	—	—	—	1	—	—	—	1	—	—	—	6	3
Special Organs :—Ear	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Bladder, etc.	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	2	—
Kidney	—	1	—	—	—	—	1	—	1	—	1	1	1	—	2	1	—	—	—	—	6	3
Testicle, etc.	1	—	—	—	—	—	—	—	—	—	3	—	1	—	2	—	2	—	—	—	9	—
Muscles, etc.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rectum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unclassified	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	2	—
Totals	69	73	75	64	51	62	40	39	17	20	28	16	15	9	18	9	8	2	1	6	322	300

The Public Health Work is summarised in the following Table and Statement:—

TABLE 7.—STATISTICS RELATING TO THE NOTIFICATION OF TUBERCULOSIS.

	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915	1914	1901 to 1913	1899 Sep. 1st to Dec. 31st, 1900	Total
Cases Visited and Registered—													*Phthisis only*		
Males	1232	1204	1277	1324	1285	1371	1288	1572	1904	2010	1930	2191	13153	1017	32758
Females	937	1032	1023	1024	928	923	974	1124	1397	1613	1575	1586	8122	732	22990
Totals	2169	2236	2300	2348	2213	2294	2262	2696	3301	3623	3505	3777	21275	1749	55748
Houses Disinfected—															
1. By Corporation—															
(*a*) With solution of chlorinated lime only	—	—	—	997	2133	2082	2507	2431	2934	635	869	994	8434	581	24597
(*b*) With lime solution only	—	—	—	—	—	—	—	—	—	—	—	—	17	109	126
(*c*) *By Esmarch's method and solution of chlorinated lime...	1332	1571	1607	717	—	—	—	—	—	1878	2415	3123	17232	—	29875
(*d*) †By Fumigating Lamp	128	—	—	—	—	—	—	—	—	—	—	—	—	—	128
Totals	1460	1571	1607	1714	2133	2082	2507	2431	2934	2513	3284	4117	25683	690	54726
2. By Tenants— *Esmarch's method or Chlorinated lime, etc.	6392	5647	5885	6268	6157	4891	4633	4167	3523	1799	3580	4564	35620	1299	94425
Totals	7852	7218	7492	7982	8290	6973	7140	6598	6457	4312	6864	8681	61303	1989	149151
Specimens of Sputum examined—															
Positive	325	391	558	528	534	437	305	401	465	721	781	1052	6601	104	13203
Negative	1415	1419	1753	1946	1585	1729	1342	1081	1471	1720	1576	2269	12022	154	31482
Totals	1740	1810	2311	2474	2119	2166	1647	1482	1936	2441	2357	3321	18623	258	44685
Cases reported as sent to Hospital ...	2027	2077	1942	2052	2139	2153	2035	2315	2400	2078	1719	2718	21678	991	48324
Notified from common lodging-houses...	76	65	84	80	102	115	80	117	143	172	212	283	2922	187	4638
Number of cases under observation ...	10379	9949	9561	9258	8606	7990	7318	6511	6898	6327	5690	5941	33102	about 600	

* Esmarch's method resumed in August, 1922, after suspension due to Food Control Order.

† Method commenced on 1st December, 1925.

TABLE 5.

SOURCES OF NOTIFICATION OF TUBERCULOSIS DURING 1925.

Source	Pulmonary	Non-Pulmonary	Totals
Crescent Road Institution	73	24	97
Withington Hospital	95	22	117
Booth Hall	58	67	125
Outside Poor Law	—	—	—
Manchester Royal Infirmary	36	99	135
Ancoats Hospital	23	57	80
Skin Hospital	—	37	37
St. Mary's Hospital	9	14	23
Northern Hospital	22	15	37
Jewish Hospital	4	10	14
Pendlebury Hospital	1	16	17
Medical Mission	—	—	—
Hulme Dispensary	—	—	—
Chorlton-upon-Medlock Dispensary	—	—	—
Gartside Street Dispensary	8	61	69
Hardman Street Dispensary	201	7	208
Bowdon Hospital	—	—	—
Asylums	22	1	23
Schools	4	26	30
Tuberculosis Staff	113	9	122
Military	24	2	26
Various Sources	65	29	94
Private Practitioners	746	126	872
Total	1,504	622	2,126

529 tenants have allowed the removal of bedding, etc., for disinfection; or have themselves burned it in a few instances.

71,622 cardboard boxes have been prepared in the office and supplied to patients for spitting purposes in the home.

682 spit bottles have been supplied for use outside the house.

14,378 visits have been made by the Enquiry Officers during the year.

38,747 letters were sent out.

1,596 notices warning against spitting on floors, etc., have been supplied to offices and workshops.

The fate of patients treated in the Crossley Sanatorium and Baguley Sanatorium during the last ten years is set forth in the following tables. Baguley Sanatorium is in the main an institution for advanced cases.

In addition to these, however, cases for observation are sent, and these may, if suitable, be transferred later to the other sanatoria at Delamere and Abergele.

The earlier the stage of the disease at which a patient can be given sanatorium treatment, the greater the prospect of permanent arrest. Properly selected cases have their best chance of arrest in the shortest time by intelligently carried out sanatorium treatment; moreover, they learn restraint, discipline, and an ordered way of life, which are essentials for maintenance of health and to prevent relapses.

TABLE 8.

CROSSLEY SANATORIUM.

Males.

Year	No. of new cases	No. of re-admissions	Died in the Sanatorium	Died elsewhere	Lost sight of	Known to be still living, Dec. 31st, 1925
1916	118	8	1	40	30	47
1917	113	12	—	44	30	39
1918	98	18	—	37	14	47
1919	114	24	—	44	13	57
1920	105	22	1	31	24	49
1921	124	26	2	51	13	58
1922	115	28	2	41	16	56
1923	125	29	1	41	14	69
1924	114	32	1	30	6	77
1925	131	25	3	10	4	114
Total	1,157	224	11	369	164	613

TABLE 8—*continued.*

CROSSLEY SANATORIUM—*continued.*

Females.

Year	No. of new cases	No. of re-admissions	Died in the Sanatorium	Died elsewhere	Lost sight of	Known to be still living, Dec. 31st, 1925
1916	74	3	—	17	33	24
1917	68	5	1	21	17	29
1918	61	9	—	23	11	27
1919	62	5	—	22	14	26
1920	56	8	—	15	14	27
1921	91	12	—	31	15	45
1922	92	13	—	33	16	43
1923	121	24	1	38	16	66
1924	135	25	—	35	15	85
1925	111	33	1	3	4	103
Total	871	137	3	238	155	475

TABLE 9.

BAGULEY SANATORIUM.

Males.

Year	No. of new cases	No. of re-admissions	Died in Sanatorium	Died elsewhere	Lost sight of	Known to be still living, Dec. 31st, 1925
1916	403	73	135	179	46	43
1917	401	76	93	165	52	91
1918	390	68	95	157	37	101
1919	445	225	85	174	52	134
1920	475	212	113	166	40	156
1921	349	196	98	137	33	81
1922	356	166	124	133	29	70
1923	365	151	113	114	27	111
1924	363	106	95	114	13	141
1925	326	88	77	27	11	211
Total	3,873	1,361	1,028	1,366	340	1,139

Females.

Year	No. of new cases	No. of re-admissions	Died in Sanatorium	Died elsewhere	Lost sight of	Known to be still living, Dec. 31st, 1925
1916	262	16	66	122	34	40
1917	277	24	66	121	42	48
1918	226	44	71	83	24	48
1919	196	30	59	78	18	41
1920	166	48	53	63	19	31
1921	164	55	53	75	15	21
1922	198	50	61	71	14	52
1923	188	38	61	59	18	50
1924	225	48	54	79	7	85
1925	199	35	42	22	5	130
Total	2,101	388	586	773	196	546

The following tables are to be read in conjunction with the tables showing the amount of assistance given in other recent years. They indicate a continuance of distress:—

The number of cases of Tuberculosis in which the income of the individual or family showed varying amounts of deficit under an assumed standard of living, and the number in which assistance was given to the individual or the family, or both, is shown in the following tables:—

TABLE 10.

TABLE SHOWING PARTICULARS OF DISTRESS IN CASES OF TUBERCULOSIS NOTIFIED DURING THE YEAR 1925. CLASSIFIED ACCORDING TO THE REQUIREMENTS OF THE FAMILY IN EXCESS OF THE INCOME. FOOD, CALCULATED ON THE ATWATER SCALE; HOUSEHOLD SUNDRIES ON MR. ROWNTREE'S SCALE. TAKING THE UNITS OF FOOD AND HOUSEHOLD SUNDRIES USED IN 1913 AS STANDARDS, VARIOUS AMOUNTS HAVE BEEN USED. IN 1922 THE AMOUNT ADDED WAS 125 PER CENT., REDUCED LATER TO 100, AND THEN TO 90 PER CENT. THROUGHOUT 1925 THE AMOUNT ADDED WAS 90 PER CENT.

PULMONARY CASES.

Conditions affecting Individual Cases	Shortage up to—in Shillings.													
	—5/-	—10/-	—11/-	—12/-	—13/-	—14/-	—15/-	—16/-	—17/-	—18/-	—19/-	—20/-	—25/- +	Total
Living December 31st, 1925 ..	55	35	3	4	8	3	3	—	2	4	2	2	7	128
Dead December 31st, 1925 ..	17	10	2	1	4	—	—	1	2	—	1	—	10	48
Relief from Guardians	21	12	—	1	—	1	1	1	1	1	2	1	8	50
Assistance from the £2,750 Grant (Family)	26	23	4	1	9	3	2	—	1	2	1	1	4	77
Assistance from the £1,500 Grant (Individual)	25	10	—	—	3	1	—	—	—	1	1	—	—	41

TABLE 11.

NON-PULMONARY CASES.

Conditions affecting Individual Cases	Shortage up to—in Shillings.													
	—5/-	—10/-	—11/-	—12/-	—13/-	—14/-	—15/-	—16/-	—17/-	—18/-	—19/-	—20/-	—25/- +	Total
Living December 31st, 1925 ..	21	8	2	3	1	3	—	3	—	—	2	—	—	43
Dead December 31st, 1925 ..	9	—	—	—	—	—	—	—	—	—	—	—	1	10
Relief from Guardians	14	3	—	—	—	—	—	—	—	—	—	—	1	18
Assistance from £2,750	13	4	2	1	1	1	—	3	—	—	1	—	—	26
Assistance from £1,500	9	—	—	1	—	2	—	—	—	—	—	—	—	12

With reference to Tables 10 and 11 it should be noted that Corporation assistance can only be given in cases which do not fall into the category of destitution.

TABLE 12.

SOURCES OF PRIMARY NOTIFICATION OF NON-PULMONARY CASES FOR THE YEARS 1918 TO 1925.

Source	1918	1919	1920	1921	1922	1923	1924	1925
Crumpsall Hospital	49	22	15	15	11	21	34	24
Withington Hospital	—	—	11	29	39	33	29	22
Booth Hall	45	33	43	60	35	38	47	67
Outside Poor Law..	2	1	—	—	—	—	2	—
Royal Infirmary	111	58	95	95	69	125	99	99
Ancoats Hospital	57	34	31	27	45	76	76	57
Skin Hospital	35	32	46	66	37	48	41	37
St. Mary's Hospital	25	2	4	—	21	21	15	14
Northern Hospital	1	1	9	4	17	30	5	15
Jewish Hospital	1	19	11	1	1	1	5	10
Pendlebury Hospital	8	5	2	3	4	8	8	16
Hulme Dispensary..	1	—	—	—	—	1	—	—
Gartside Street Dispensary..	66	19	25	63	36	71	41	61
Hardman Street Dispensary..	15	9	23	23	33	21	11	7
Bowdon Hospital	—	—	2	—	—	3	1	—
Asylums	6	2	8	7	2	—	2	1
Schools	5	3	37	31	38	34	23	26
Tuberculosis Office Staff ..	6	16	16	7	13	20	19	9
Army	14	2	—	1	3	7	1	2
Various Sources	17	8	11	13	21	20	14	29
Private Practitioners	234	168	148	131	180	152	150	126
	698	434	537	576	605	730	623	622

Table 13.

Primary Notifications of Pulmonary and Non-Pulmonary Tuberculosis received from Municipal Wards during 1925.

Wards	Pulmonary	Non-Pulmonary	Totals
1. Exchange	1	1	2
2. New Cross	98	39	137
3. St. Clement's	20	4	24
4. Oxford	10	1	11
5. St. John's	24	8	32
6. St. Ann's	—	—	—
7. St. Michael's	78	38	116
8. Collyhurst	65	30	95
9. Cheetham	21	8	29
10. Collegiate Church	43	24	67
11. Crumpsall	21	15	36
12. Blackley	33	11	44
13. Harpurhey	48	20	68
14. Moston	20	9	29
15. Newton Heath	42	17	59
16. Miles Platting	75	21	96
17. Bradford	48	32	80
18. Beswick	39	35	74
19. Ardwick	79	27	106
20. Openshaw	49	22	71
21. St. Mark's	42	28	70
22. Longsight	37	12	49
23. All Saints	77	15	92
24. St. Luke's	80	22	102
25. Medlock Street	77	41	118
26. St. George's	79	28	107
27. Moss Side East	36	16	52
28. Moss Side West	45	12	57
29. Chorlton-cum-Hardy	49	14	63
30. Didsbury	19	7	26
31. Withington	20	8	28
32. Gorton North	36	20	56
33. Gorton South	47	15	62
34. Levenshulme	27	10	37
35. Rusholme	19	12	31
Total—City of Manchester	1,504	622	2,126

Table A.

Summary of Primary Examinations made by the Senior Tuberculosis Officer and Assistant Tuberculosis Officers in 1925.

	Reason for Examination				Occupational Condition at Examination		Diagnosis															Recommendations made						
							Pulmonary Tuberculosis			Tuberculosis of																		
	Treatment	Claimed Recovery	Diagnosis	Contacts	Working (or at School)	Not Working	Stage I.	Stage II.	Stage III.	Larynx	Bones and Joints	Glands	Abdomen	Other Organs	Doubtful Tuberculosis	Bronchitis	Heart Lesions	Other Diseases	No evidence of Tuberculosis	Recovery	No Disease	Delamere and Abergele	Baguley	Hardman Street Dispensary	Union	Other Hospitals	Private Practitioners	Observation
Males ..	267	50	260	61	243	395	70	87	146	12	19	21	6	23	93	84	13	79	112	44	51	91	129	10	12	44	128	129
Females	160	48	187	88	254	229	55	58	78	12	9	19	16	13	89	41	8	59	115	36	45	61	94	17	7	41	66	116
Children.	264	51	76	259	335	315	48	20	15	—	42	89	43	28	87	34	7	76	283	60	130	3	—	46	23	218	41	129
Totals ..	1,771				1,771		*2,109													1,771								

* Total of "diseases" as distinct from total cases examined, *i.e.*, several patients had more than one form of disease present.

TABLE B.—RESULT OF EXAMINATION OF CASES SENT FOR DIAGNOSIS, 1925.

	Pulmonary Tuberculosis			Tuberculosis of					Doubtful Tuberculosis	No evidence of Tuberculosis	Bronchitis	Heart Lesions	Other Diseases
	Stage I.	Stage II.	Stage III.	Larynx	Bones and Joints	Glands	Abdomen	Other Organs					
Males	25	31	47	2	2	1	3	5	69	55	49	7	50
Females	29	27	28	7	2	2	3	—	62	34	21	4	34
Children	11	6	5	—	—	7	2	2	18	26	13	1	20

TABLE C.—RESULT OF EXAMINATION OF CONTACTS.

Males	—	5	3	1	—	—	—	—	20	35	9	1	8
Females	2	1	1	—	—	—	—	1	27	57	10	—	15
Children	—	—	2	—	—	3	—	—	50	202	28	3	47

TABLE D.—DISPENSARY RETURN, 1925.

Number of persons, including Contacts, who were examined for the first time during the period from January 1st to December 31st, 1925, at or in connection with the Dispensary or Visiting Station, and were					Number of persons diagnosed to be suffering from Tuberculosis who were treated or supervised at or in connection with the Dispensary or Visiting Station during the period from January 1st to December 31st, 1925		Number of persons who were under treatment, supervision, or observation at or in connection with the Dispensary or Visiting Station on December 31st, 1925	
Diagnosed as suffering from Tuberculosis	Diagnosed as *not* suffering from Tuberculosis	Undiagnosed and remaining under observation	Total number examined					
			Insured	Uninsured	Insured	Uninsured	Insured	Uninsured
1,083	2,173	406	702	2,960	91	823	36	405

TABLE E.—INSURED CASES TREATED IN 1925.

Residential	1,223
Dispensary	91
Domiciliary	2,402
Total	3,716

ANALYSIS OF CASES TREATED.

TABLE I.—*Residential* (*Insured*).

INSTITUTION	Total Cases Treated		Discharged from Institutions		Died	*Residential Treatment discontinued in other cases	Still under Residential Treatment on 1st Jan., 1926
	Males	Females	Improved	Without Improvement			
	(1)		(2)	(3)	(4)	(5)	(6)
			Pulmonary				
Baguley	498		174	65	97	8	154
		202	36	31	46	4	85
Crossley	148		90	21	1	6	30
		128	81	15	—	6	26
Abergele	110		60	14	1	—	35
		25	13	4	—	—	8
Total Pulmonary	756	355	454	150	145	24	33
			Non-Pulmonary				
Manchester Royal Infirmary ..	38		32	—	1	3	2
		17	16	—	—	—	1
Skin Hospital	3		2	—	—	—	1
		—	—	—	—	—	—
Ancoats Hospital	5		5	—	—	—	—
		5	4	1	—	—	—
Total Non-Pulmonary.. ..	46	22	59	1	1	3	
TOTAL—ALL FORMS..	802	377	513	151	146	27	342

* The figures in column (5) relate to cases as to the progress of which no definite report is available for various reasons—*e.g.*, the withdrawal from the Institution of the insured persons themselves before the expiration of the period for which they were nominated for the treatment.

In addition to the above cases, 47 cases mostly ex-service men, have been admitted to the East Lancashire Training Colony, Barrowmore Hall, for treatment and for training.

TABLE II.—*Residential* (*Uninsured*).

INSTITUTION	Total Cases Treated			Discharged from Institutions		Died	*Residential Treatment discontinued in other cases	Still under Residential Treatment on 1st Jan., 1926
	Males	Females (1)	Children	Improved (2)	Without Improvement (3)	(4)	(5)	(6)
				Pulmonary				
uley	109			36	10	20	5	38
		118		22	26	29	4	37
			—	—	—	—	—	—
sley	42			26	5	1	3	7
		54		34	6	1	2	11
			—	—	—	—	—	—
rgele	27			16	4	—	—	7
		10		7	1	—	—	2
			—	—	—	—	—	—
otal Pulmonary..	178	182	—	141	52	51	14	102
				Non-Pulmonary				
rgele	—			—	—	—	—	—
		—		—	—	—	—	—
			15	5	—	—	—	10
chester Royal firmary	2			2	—	—	—	—
		10		7	1	—	—	2
			24	20	—	1	1	2
Hospital	2			1	—	—	—	1
		3		3	—	—	—	—
			12	11	—	—	—	1
ats Hospital ..	2			1	—	1	—	—
		3		3	—	—	—	—
			16	16	—	—	—	—
otal Non-Pulmonary	6	16	67	69	1	2	1	16
AL—ALL FORMS..	184	198	67	210	53	53	15	118

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* The figures in column (5) relate to cases of which no definite report is available for various asons—*e.g.*, the withdrawal from the Institution of the persons themselves before the expiration the period for which they were nominated for the treatment.

TABLE III.—*Dispensary* (*Insured*).

	Total cases treated (1)	Discharged from Institution		Died (4)	* Treatment discontinued in other cases (5)	Still under treatment on 1st January, 1926 (6)
		Improved (2)	Without Improvement (3)			
Men	62	10	7	5	11	29
Women	29	8	7	—	7	7
Totals	91	18	14	5	18	36

* See footnote to table I.

TABLE IV.—*Dispensary* (*Uninsured*).

	Total cases treated (1)	Discharged from Institution		Died (4)	Still under treatment on 1st January 1926 (5)
		Improved (2)	Without Improvement (3)		
Men	95	23	37	2	33
Women	322	92	96	1	133
Children (under 16) ..	406	109	58	—	239
Totals	823	224	191	3	405

Under the Corporation scheme patients suffering from surgical tuberculosis have received treatment at the Manchester Royal Infirmary and Ancoats Hospital, and cases of tuberculosis of the skin have been treated at the Skin Hospital.

The types of case are summarised below.

Bones and Joints	39
Glands	57
Genito-Urinary Tract	9
Abdomen	19
Tongue	1
Lupus Vulgaris	196
Toxi-Tuberculids	3
Bazins Disease	4
Tuberculous Ulceration of Skin.	25

TABLES SHOWING AFTER HISTORY OF ARRESTED CASES.

		No Tubercle Bacilli Found.					*Tubercle Bacilli Found.*			
Stage	Sex	Number of Cases taken off S.B.	Number known to be still living at end of 1925	Lost sight of	Died	Sex	Number of Cases taken off S.B.	Number known to be still living at end of 1925	Lost sight of	Died
					1913.					
I.	M	1	1	—	—	M	—	—	—	—
	F	5	2	3	—	F	—	—	—	—
II.	M	2	—	1	1	M	1	1	—	—
	F	—	—	—	—	F	—	—	—	—
III.	M	—	—	—	—	M	—	—	—	—
	F	—	—	—	—	F	—	—	—	—
	M & F	8	3	4	1	M & F	1	1	—	—
					1914.					
I.	M	14	5	4	5	M	4	3	1	—
	F	13	8	4	1	F	2	1	1	—
II.	M	3	2	1	—	M	3	1	—	2
	F	2	1	1	—	F	—	—	—	—
III.	M	2	—	1	1	M	1	—	1	—
	F	—	—	—	—	F	1	—	—	1
	M & F	34	16	11	7	M & F	11	5	3	3
					1915.					
I.	M	20	8	8	4	M	14	6	—	8
	F	19	11	4	4	F	3	2	—	1
II.	M	16	9	4	3	M	2	—	—	2
	F	6	5	1	—	F	2	2	—	—
III.	M	1	1	—	—	M	4	3	—	1
	F	1	1	—	—	F	—	—	—	—
	M & F	63	35	17	11	M & F	25	13	—	12
					1916.					
I.	M	16	9	3	4	M	10	6	—	4
	F	15	11	4	—	F	2	—	2	—
II.	M	4	3	—	1	M	6	2	2	2
	F	7	5	1	1	F	—	—	—	—
III.	M	1	1	—	—	M	1	—	—	1
	F	1	—	1	—	F	1	—	—	1
	M & F	44	29	9	6	M & F	20	8	4	8

TABLES SHOWING AFTER HISTORY OF ARRESTED CASES—continued

1917.

	No Tubercle Bacilli found.					*Tubercle Bacilli found.*				
Stage	Sex	Number of Cases taken off S.B.	Number known to be still living at end of 1925	Lost sight of	Died	Sex	Number of Cases taken off S.B.	Number known to be still living at end of 1925	Lost sight of	Died
I.	M	19	17	2	—	M	9	6	1	2
	F	11	7	3	1	F	3	1	—	2
II.	M	14	10	1	3	M	4	1	—	3
	F	7	6	1	—	F	1	—	1	—
III.	M	2	1	1	—	M	3	1	—	2
	F	—	—	—	—	F	—	—	—	—
	M & F	53	41	8	4	M & F	20	9	2	9

1918.

I.	M	18	10	5	3	M	6	3	1	2
	F	15	11	1	3	F	5	4	—	1
II.	M	13	9	1	3	M	7	5	—	2
	F	5	3	1	1	F	—	—	—	—
III.	M	3	3	—	—	M	1	1	—	—
	F	1	1	—	—	F	2	2	—	—
	M & F	55	37	8	10	M & F	21	15	1	5

1919.

I.	M	26	22	3	1	M	7	5	—	2
	F	10	8	2	—	F	3	3	—	—
II.	M	14	10	1	3	M	12	10	—	2
	F	11	9	1	1	F	10	8	1	1
III.	M	4	2	1	1	M	3	2	1	—
	F	1	1	—	—	F	1	—	—	1
	M & F	66	52	8	6	M & F	36	28	2	6

1920.

I.	M	22	17	1	4	M	14	9	2	3
	F	7	5	2	—	F	4	1	3	—
II.	M	20	13	4	3	M	7	4	—	3
	F	7	6	1	—	F	3	2	1	—
III.	M	2	1	—	1	M	2	2	—	—
	F	1	1	—	—	F	2	2	—	—
	M & F	59	43	8	8	M & F	32	20	6	6

TABLES SHOWING AFTER HISTORY OF ARRESTED CASES—continued

1921.

	No Tubercle Bacilli found.					*Tubercle Bacilli found.*				
Stage	Sex	Number of Cases taken off S.B.	Number known to be still living at end of 1925	Lost sight of	Died	Sex	Number of Cases taken off S.B.	Number known to be still living at end of 1925	Lost sight of	Died
I.	M	27	20	4	3	M	15	14	—	1
	F	19	15	4	—	F	3	3	—	—
II.	M	17	10	3	4	M	17	12	3	2
	F	7	6	1	—	F	3	2	1	—
III.	M	4	2	—	2	M	1	—	—	1
	F	3	3	—	—	F	—	—	—	—
	M & F	77	56	12	9	M & F	39	31	4	4

1922.

	No Tubercle Bacilli found.					*Tubercle Bacilli found.*				
Stage	Sex	Number of Cases taken off S.B.	Number known to be still living at end of 1925	Lost sight of	Died	Sex	Number of Cases taken off S.B.	Number known to be still living at end of 1925	Lost sight of	Died
I.	M	38	31	4	3	M	13	12	—	1
	F	19	15	3	1	F	4	4	—	—
II.	M	18	15	1	2	M	22	16	3	3
	F	12	10	1	1	F	9	7	2	—
III.	M	9	9	—	—	M	3	3	—	—
	F	3	2	1	—	F	—	—	—	—
	M & F	99	82	10	7	M & F	51	42	5	4

1923.

	No Tubercle Bacilli found.					*Tubercle Bacilli found.*				
Stage	Sex	Number of Cases taken off S.B.	Number known to be still living at end of 1925	Lost sight of	Died	Sex	Number of Cases taken off S.B.	Number known to be still living at end of 1925	Lost sight of	Died
I.	M	19	16	3	—	M	19	15	2	2
	F	17	16	1	—	F	2	2	—	—
II.	M	20	17	2	1	M	3	3	—	—
	F	5	4	1	—	F	5	3	1	1
III.	M	3	3	—	—	M	6	3	1	2
	F	1	1	—	—	F	1	—	—	1
	M & F	65	57	7	1	M & F	36	26	4	6

1924.

	No Tubercle Bacilli found.					*Tubercle Bacilli found.*				
Stage	Sex	Number of Cases taken off S.B.	Number known to be still living at end of 1925	Lost sight of	Died	Sex	Number of Cases taken off S.B.	Number known to be still living at end of 1925	Lost sight of	Died
I.	M	59	52	4	3	M	16	15	—	1
	F	22	21	—	1	F	3	3	—	—
II.	M	35	33	1	1	M	18	17	1	—
	F	20	20	—	—	F	2	2	—	—
III.	M	13	12	—	1	M	8	8	—	—
	F	9	9	—	—	F	2	2	—	—
	M & F	158	147	5	6	M & F	49	47	1	1

D. P. SUTHERLAND.

BAGULEY SANATORIUM.

REPORT FOR THE YEAR 1925.

The number of available beds was 333.

The number of patients admitted was 669, the daily average being 319·3.

The table below gives the number of patients in hospital each month in the years 1921, 1922, 1923, 1924, 1925.

	1921	1922	1923	1924	1925
January	310	311	304	319	*300
February	311	309	310	314	*310
March	310	311	311	317	319
April	314	313	311	*310	325
May..	308	310	322	*317	325
June	313	319	326	*319	325
July..	302	320	324	*317	332
August	305	318	331	*309	329
September	307	304	324	*310	316
October	314	324	326	*310	326
November	301	314	323	*309	322
December	291	298	300	*296	318

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* The number of available beds was 327, owing to the relaying of the floor in one of the wards.

On December 31st, 1925, there were 71 patients who had been in the Institution for a longer period than one year, as follows: --

Patients in hospital for	1–2 years	48
,, ,,	2–3 ,, ...	12
,, ,,	3–4 ,, ...	2
,, ,,	4–5 ,, ...	2
,, ,,	over 5 ,, ...	7

Number of patients in hospital, January 1st	296
,, ,, admitted during the year	669
,, ,, discharged ,, ,, ...	452
,, ,, who died ,, ,, ...	195
Total number of patients treated	965
Patients remaining in hospital, December 31st	318

Bucklow Cases (included in above totals).

On January 1st, 1925, there were 3 patients from the Bucklow Rural District Council, 7 patients were admitted during the period, 3 patients discharged, and 3 died; 4 patients remained in the hospital on December 31st.

The average length of stay of patients discharged during the period:—

Males	162·28 days.
Females	156·31 ,,

Pathological Laboratory Report:—

Number of specimens of sputum examined:—

Number of examinations	2,296
Positive	1,143
Negative..	1,153

Other examinations:—

Special examination of urine	54
Pleural effusion	9
Blood	—
Pus	11
Cerebral spinal fluid	1

(In the examinations tubercle bacilli were found in the following:—Urine 5, pleural effusion 5, pus 3.)

Number of autopsies	40

A large number of Wassermann's reactions were carried out at the Public Health Laboratory.

During the year Dr. E. Whiteside carried out an investigation into the value of the Weisz Urochromogen reaction in pulmonary tuberculosis.

The following are the facts of this preliminary report on the tests as applied to 311 patients and carried out 2,350 times :—

> The test may be considered under two headings—firstly, those definitely positive and definitely negative, and, secondly, those faintly positive.
>
> In the first group it is found that a persistently positive reaction usually means a very poor prognosis with death within three to six months, although other signs may appear favourable. A persistently negative reaction indicated a good prognosis, and should death occur is usnally due to fatal hæmoptysis or some intercurrent disease.
>
> In the second group a faintly positive reaction is apparently of little prognostic significance, usually transient, and in our opinion occurs—
>
> (*a*) During slight excessive auto-inoculation which is not demonstrated by the temperature chart, etc.
>
> (*b*) During the menstrual period.
>
> (*c*) During the course of intercurrent affections, such as cystitis, enteritis, epileptic seizures, and asthma attacks.
>
> In this second group it is essential that control tests should be carried out.

From the data at present acquired it appears that this simple and quickly performed test is of value in assisting to form a prognosis, and, it is hoped, in controlling auto-inoculation.

X-Ray Report.

Number of patients screened	325
Number of photographs taken..	28

Dental Report.

Patients seen	434
Fillings	9
Extractions	351
Dentures	13
Repairs and adjustments to dentures	25
Scaling	8

CLASSIFICATION ON DISCHARGE.

Females—Ages 15–24.

The number of patients discharged during the year was 61.

Turban Gerhardt	International						
	1	2	3	4	5	6	
1	..	..	..	3	..	..	Improved ..30
2	..	..	..	12	..	..	Stationary ..10
3	..	..	2	18	10	12	Worse 17

Two patients suffered from non-tuberculous disease.

Two patients left before diagnosis was completed.

Thirty-two patients were admitted with a positive sputum, of whom three were negative on discharge.

Females—Ages 25–34.

The number of patients discharged during the year was 46.

CLASSIFICATION ON DISCHARGE.

Turban Gerhardt	International						
	1	2	3	4	5	6	
1	1	1	..	..	..	..	Improved ..25
2	..	..	..	6	..	..	Stationary ..10
3	..	..	..	12	18	6	Worse 9

Two patients left before diagnosis was complete.

Twenty-three patients were admitted with a positive sputum, of whom four were negative on discharge.

Females—Ages 35-44.

The number of patients discharged during the year was 24.

Classification on Discharge.

Turban Gerhardt	International						
	1	2	3	4	5	6	
1	..	..	..	..	..	..	Improved ..13
2	..	..	..	1	1	..	Stationary .. 7
3	..	..	..	8	10	2	Worse 2

Two patients suffered from non-tuberculous disease.

Twenty-four patients were admitted with a positive sputum.

Females—Ages 45 *and over.*

The number of patients discharged during the year was 48.

Classification on Discharge.

Turban Gerhardt	International						
	1	2	3	4	5	6	
1	2	..	..	1	..	..	Improved .. 9
2	..	..	..	..	..	..	Stationary .. 8
3	..	..	..	6	12	2	Worse 4

One patient did not suffer from tuberculous disease.

Three patients left before diagnosis was complete.

Fifteen patients were admitted with a positive sputum, of whom three were negative on discharge.

Males—Ages 15–24.

The number of patients discharged during the year was 48.

Classification on Discharge.

Turban Gerhardt.	International						
	1	2	3	4	5	6	
1	..	..	..	..	..	..	Improved ..32
2	..	..	..	8	..	..	Stationary .. 6
3	..	..	..	18	13	5	Worse 6

Three patients showed no signs of pulmonary tuberculosis.

One patient left before diagnosis was complete.

Twenty-two patients were admitted with a positive sputum, of whom one was negative on discharge.

Males—Ages 25–34.

The number of patients discharged during the year was 48.

Classification on Discharge.

Turban Gerhardt	International						
	1	2	3	4	5	6	
1	..	1	..	..	..	..	Improved ..32
2	..	..	3	2	..	..	Stationary .. 9
3	..	..	..	16	17	8	Worse 6

One patient showed no signs of pulmonary tuberculosis.

Twenty-six patients were admitted with a positive sputum, of whom two were negative on discharge.

Males—Ages 35-44.

The number of patients discharged during the year was 73.

CLASSIFICATION ON DISCHARGE.

Turban Gerhardt	International						
	1	2	3	4	5	6	
1	..	..	1	..	..	..	Improved ..41
2	..	..	1	4	..	..	Stationary ..22
3	..	..	..	26	34	6	Worse 9

One patient left before diagnosis was complete.

Thirty-five patients were admitted with a positive sputum, of whom ten were negative on discharge.

Males—Ages over 45.

The number of patients discharged during the year was 127.

CLASSIFICATION ON DISCHARGE.

Turban Gerhardt	International						
	1	2	3	4	5	6	
1	..	..	..	1	..	..	Improved ..83
2	..	..	1	6	1	..	Stationary ..26
3	..	..	..	39	62	13	Worse 14

One patient showed no signs of active tuberculosis.

Three patients left before diagnosis was complete.

Sixty-two patients were admitted with a positive sputum, of whom eight were negative on discharge.

Complications in Female Cases discharged during the year.

Hæmoptysis	1
Tuberculous larynx	13
,, peritonitis	1
,, enteritis	6
,, kidney	2
,, abscess	1
Auricular fibrillation	1
Bronchitis	2
Emphysema	1
Gastritis	1
Glycosuria	1
Hæmorrhoids	1
Irregular cardiac action	1
Menorrhagia	1
Pleural effusion	3
Pott's disease	1
Pregnancy	1
Sebaceous cyst	1
Venous thrombosis Leg	1
Total	40

Complications in Male Cases discharged during the year.

Tuberculosis of the larynx	26
,, ,, spine	2
,, of bone (other than spine)	4
Tuberculous abscesses (face and neck)	1
,, adenitis (neck)	3
,, enteritis	4
,, peritonitis	1
,, synovitis of knee	1
,, ulcers of tongue	3
Carried forward	45

Complications in Male Cases discharged during the year— continued

Brought forward	45
Albuminuria	1
Appendicitis	1
Ascites	1
Bell's palsy	2
Bronchitis	12
Empyema	2
Epilepsy	1
Fistula in ano	1
Gastritis	1
Hæmoptysis	11
Hæmorrhoids	3
Hernia—Inguinal	1
Lipoma	1
Malaria	2
Mitral disease	2
Myelitis—Specific	1
Myositis	1
Nasal catarrh	1
Neurasthenia	1
Otitis media	2
Otorrhœa	1
Paresis—Leg	1
Parotid tumour	1
Periostitis—Rib	1
Pleural effusion	2
Rheumatism	2
Scoliosis	1
Scrotal sinus	1
Tachycardia	1
Traumatic sciatica	1
Urethral stricture	1
Varicose veins	2
Total	108

Complications occurring amongst Fatal Cases in 1925.

Complication	Male	Female
Hæmoptysis	10	3
Tuberculous bone (tibia)	1	—
,, enteritis	4	8
,, gluteal abscess	—	1
,, ischio rectal abscess	2	—
,, kidney	1	1
,, laryngitis	23	13
,, meningitis	—	1
,, peritonitis	—	1
,, testicle	1	—
,, ulcers of intestines	1	2
,, ulcers of mouth	1	—
Anthracosis	1	—
Bronchitis	2	—
Broncho-pneumonia	1	1
Cystitis	—	1
Dextrocardia	1	—
Emphysema	1	—
Lupus vulgaris	—	1
Mitral incompetence	6	—
Myocarditis	1	—
Nephritis	1	—
Neurasthenia	1	—
Ovarian cyst	—	1
Perisplenitis	1	—
Pernicious anæmia	1	—
Pyloric stenosis	1	—
Pyorrhœa	—	1
Spontaneous pneumothorax	—	2
Non-pulmonary: Aneurysm (aortic); carcinoma pyloris; bronchiectasis	1	—
Total	63	37
Uncomplicated cases	56	39

Fourteen fatal cases were under one week in the hospital.

Twenty-nine fatal cases were over one week in the hospital but less than three.

The total number of deaths was 195, made up of 119 males and 76 females, representing a case fatality of 20·2 per cent.

Patients.

During the year, owing to a rearrangement of beds, a larger number of female cases have been treated than in previous years.

Lectures have been given to both male and female patients, and the majority of the patients have loyally co-operated in carrying out the advice given to them and the treatment prescribed.

Treatment.

Routine treatment has been on the same lines as in previous years. Occupational treatment has been the same as previously; the number of male patients on graded work has averaged 50 per diem, but the number attaining to the highest grade is still small. It is hoped that a scheme of handicrafts under a whole-time instructor will be inaugurated during 1926, and that it will become an integral part of the life of the Institution.

Special Methods of Treatment.

Artificial pneumothorax has been induced in suitable cases, and the following table shows the progress made :—

Induced.	Discharged.	Died.	Still under Treatment.
19	9	4	6

Calcium Salts.—Treatment by colloidal salts has become a routine in suitable cases.

There have been no other special forms of treatment used.

Staff.

The numbers of the nursing staff have been increased by two special trained staff nurses and five probationers during the past year.

It is hoped that a scheme of affiliation with one or more general hospitals for the complete training of probationer nurses will materialise at an early date. Such a scheme should be most valuable for the immediate future, but will lose some of its value when it is recognised that nursing duties carried out under sanatorium conditions is one of the most suitable vocations for arrested cases of pulmonary tuberculosis. Three nurses obtained the certificate of the Society of Superintendents of Tuberculosis Institutions during the past year.

Extensions and Improvements.

Most of the old accommodation vacated by the domestic staff will, after slight alterations, become available for the increase in the nursing staff,

A study room is being provided for probationer nurses,

The kitchen enlargement has proved the success contemplated when it was recommended.

The X-ray is now working, and its value will be enhanced by time.

It is proposed to carry out the laying of macadam paths in the sanatorium grounds on similar lines to the roadwork carried out previously.

The treatment of the sewage effluent by chlorine is still in force, but the whole system will have to be reorganised or a new one installed.

It is not yet possible to provide a chapel, though it is hoped that at a not too distant date it will be included in the schemes for completion.

Entertainments.

The grateful thanks of the patients and staff are tendered to Messrs. Gaumont Limited for the weekly supply of films during the winter months.

Thanks are also due to the many amateur and professional entertainers who gave their services in providing concerts throughout the winter, and to the various bands who gave afternoon concerts during the summer.

Whist drives were held weekly, and they proved very popular, particularly those in which prizes were given from the Canteen Fund.

During the summer months bowling matches were arranged with various outside clubs, and were most enjoyable and successful.

A number of inter-ward billiard matches have been played, and these, together with several knock-out competitions, have been much enjoyed by the male patients.

In conclusion, I wish to express my thanks to the staff for the loyal and willing manner in which their duties have been carried out.

H. G. TRAYER.

The tables attached show the results of the examination of patients tested with tuberculin in 1919, 1920, 1921, 1922, and 1923. In each case the after-history column has been very kindly completed by the Senior Tuberculosis Officer.

Tested 1919		Condition, February 1925	
No reaction to tuberculin	10	No evidence of active tubercule ..	6
		Probably not active tuberculosis ..	1
		Not traced	3
Doubtful reaction	1	Dead	1
Very doubtful reaction	1	Probably non-tubercular silicosis ..	1
Positive reaction	3	Quiescent	1
		With signs not active	1
		Dead	1

Tested 1920		Condition February, 1925	
No reaction to tuberculin	11	No evidence of active tuberculosis	7
		Dead	2
		Not traced	2
Doubtful reaction	1	Not active tuberculosis	1
Positive reaction	1	Left the district	1

Tested 1921		Condition February, 1925	
No reaction to tuberculin	5	Not traced	4
		Dead	1
Doubtful reaction	2	No active tuberculosis	2

Tested 1922		Condition February, 1925	
No reaction to tuberculin	10	Active tuberculosis	1
		No evidence of active tuberculosis	2
		Dead	4
		Not traced	3
Doubtful reaction	3	No evidence of active tuberculosis	1
		Probably active tuberculosis	1
		Dead	1

Tested 1923		Condition February, 1925	
No reaction to tuberculin	2	No evidence of active tuberculosis	2
Positive reaction	1	Disease quiescent	1

TABLE I.—SHOWING THE APPLICATION OF TUBERCULIN TO THE DIAGNOSIS OF DOUBTFUL CASES IN 1919.

NOS.	PHYSICAL SIGNS	TUBERCULIN	SPUTUM	REACTION	DIAGNOSIS	AFTER HISTORY, 1925
1. Age 26	Impaired percussion note right apex. Faint inspiratory crepitations	·001 ·005 ·005 ·01 ·01 June, 1919	None	Negative	Nasal obstruction. No evidence of active tubercle	1. No definite signs. Slight loss of weight.
2. Age 24	Impaired percussion note right apex. Prolonged expiratory murmur	·001 ·005 ·01 Nov., Dec., 1919	None	Negative	No evidence of active tubercle	2. No definite signs. Bronchitis.
3. Age 19	Impaired percussion note right apex.	·001 ·005 ·01 ·01 Sept., 1919	None	Negative	No evidence of active tubercle	3. No active signs.
4. Age 18	Impaired percussion note over both apices. Prolonged expiratory murmur over right upper lobe	·001 ·005 Nov., 1919	None	Negative	No evidence of active tubercle	4. No active signs.
5. Age 39	Impaired percussion note over right apex. Breath sounds weak in right upper lobe. Defective basal expansion, mitral stenosis	·001 Nov., 1919	Sputum suspicious	Temperature never higher than 98·4, but irregular	?	5. Very little activity of disease, but slight progressive loss of weight. Full work.
6. Age 32	Slight impairment of percussion note at the left base. Prolonged expiration left base	·001 ·005 ·005 June, 1919	Negative	General reaction focal pleuritic rub, right base	Tuberculous pleurisy right base ? L	6. Disease quiescent.
7. Age 25	Scar and small sinus from G.S.W. chest below angle of left scapula. Percussion note impaired over left upper lobe. Fine inspiratory creps over both apices behind. Moist râles at angle of left scapula	·001 ·003 ·005 May, 1919	? + 31-5-19	Nil.	Doubtful	7. Lost sight of.
8. Age 39	Physical signs of bronchitis and emphysema	·001 18–8–19	Negative on three occasions until 12-11-20, 86 days after reaction	General reaction, local reaction, focal reaction in left lower lobe at the angle of scapula	Bronchitis and emphysema T.B. focus in left lower lobe	8. Died in Baguley 27th February, 1920.
9. Age 26	Bronchitis, both bases	·001 July, 1919	Negative on six occasions	Nil.	Chronic bronchitis, Nasal obstruction. Laryngitis	9. Tuberculosis quiescent. Slight bronchitis. General condition poor.
10. Age 34	Broncho-vesicular breathing below angle of right scapula. Defective expansion at both apices	·001 ·003 ·005 June, July, 1919	Negative	Focal pleuritic rub. rt. base. Increase in sputum No general reaction	Positive	10. Very little activity. Full work.
11. Age 26	Impaired percussion note right apex. Diminished basal expansion right. Doubtful creps at extreme apex of right lung	·001 ·005 Sept., 1919	Negative	None	Post nasal catarrh	11. Lost sight of.
12. Age 32	Slight impairment of percussion note right apex. Doubtful occasional crepitations extreme apex	·001 ·005 ·01 Nov., Dec., 1919	Negative	None	Not T.	12. No signs of activity.
13. Age 34	Slight impairment of percussion note both apices. Some congestive crepitations at both bases	·001 ·005 ·01 May, 1919	None	None	Not T.	13. Lost sight of.
14. Age 40	Fibrosis right upper lobe. Impaired percussion note. Tubular breathing occasional fine râles	·001 Nov., 1919	None	Local reaction, slight pain in right side. No general reaction	Probable silicosis right lung. Left hospital prematurely	14. No evidence of active disease. Patient working. Attends doctor weekly for ? gastric ulcer.
15.	Bronchitis, emphysema, alcoholic gastritis	·001 Dec., 1919	Negative	Doubtful reaction. Temperature rose 6°. No local or focal symptoms	Left prematurely before diagnosis complete	15. Died January, 1922, of active lesion.

TABLE II.—SHOWING THE APPLICATION OF TUBERCULIN TO THE DIAGNOSIS OF DOUBTFUL CASES IN 1920.

NOS.	PHYSICAL SIGNS	TUBERCULIN	SPUTUM	REACTION	DIAGNOSIS	AFTER HISTORY, 1925
1. Age 39	Impaired note left apex. Faint inspiratory crepitations, rather transient in type	·0001 ·0005 ·001 } Jan., 1920	Negative	None	Not active	1. No evidence of active disease.
2. Age 26	Impaired percussion note. Transient crepitations right apex	·001 ·005 ·01 } Feb., 1920	Negative	None	No evidence of active tuberculosis	2. T.B. positive. Died in Baguley 2nd November, 1922.
3. Age 33	Impaired note left apex. Occasional scattered rhonchi generally. Post tussive creps left base Infection of left vocal cord	·001 ·005 ·01 } March, 1920	Negative	Creps appearing after ·01 cc. O.T. in left lower lobe. No general reaction	Doubtful	3. Has left Manchester.
4. Age 44	Patient obese. Impaired percussion note left apex. Signs of general bronchitis. Enlarged turbinate. Right nostril, nasal obstruction	·001 ·005 ·01 } June, 1920	Negative	None	Bronchitis and emphysema No evidence of active tubercle	4. No evidence of active disease.
5. Age 38	Impaired percussion note right base, below scapular angle. Fine inspiratory crepitations. *X Ray.*—Fine consolidation spreading from roots of both lungs, especially right. Probably not active	·001 ·005 ·01 } June, 1920	Negative	None	Not active tubercle	5. Died 23rd December, 1920, from chronic bronchitis and cardiac failure.
6. Age 27	Tremors. Pulsation of arteries. Slight enlargement of thyroid. Impairment of percussion note right upper lobe and right root. Inspiratory phase rather harsh	·001 ·005 ·01 } Nov., 1920	Negative	Temperature: 100 after ·001. No focal or local reaction. No reaction after ·005 cc.	Hyperthyroidism. No evidence of active tubercle	6. No signs of active disease. Full work.
7. Age 28	Percussion note right apex. Occasional post tussive râles right apex. Generalised bronchitis	·001 ·005 } July, 1920	Negative	None	Doubtful	7. No evidence of active disease. Bronchitis.
8. Age 40	Emphysema. Transient creps. Right apex. Nasal obstruction. Enlarged turbinates	·002 ·005 ·015 } Aug., 1920	Negative	None	Not active tuberculosis	8. No evidence of active disease.
9. Age 38	Impairment of percussion note, right upper lobe. Expiratory phase prolonged. *X Ray.*—Root shadow right side. Considered suspicious only	·001 ·002 ·002 } Sept., 1920	None	None, except local reaction after second and third doses	Not active tuberculosis	9. Lost sight of.
10. Age 38	Scattered catarrhal signs in both lungs. Some diminution in expansion, right base. Rhinitis, pharyngitis. Both vocal cords infected in posterior two-thirds of their length	·001 ·005 ·01 } Nov., 1920	Negative	None	No evidence of active tuberculosis	10. No active signs. Full work.
11. Age 29	Impairment of percussion note, right apex. Fine râles in both lungs. Deviated nasal septum. Blood pressure 170. Accentuated aortic, 2nd sound	·001 ·005 ·01 } Nov., 1920	Negative	None, except headache after second and third doses	No evidence of active tuberculosis	11. No signs of active disease.
12. Age 36	Bronchitis and emphysema. Dilated stomach	Nil	None	None	Pyloric obstruction. Dilated stomach	12. Under treatment for bronchitis.
13. Age 27	Generalised dry rhonchi throughout both lungs. Percussion note impaired left apex, behind	·001 ·005 ·01 } 1920	Negative	None	No evidence of active tuberculosis	13. Lost sight of.

Table III.—Showing the Application of Tuberculin to the Diagnosis of Doubtful Cases in 1921.

NOS.	PHYSICAL SIGNS	TUBERCULIN	SPUTUM	REACTION	DIAGNOSIS	AFTER HISTORY, FEBRUARY, 1925
1. Age 25	Slightly impaired note right apex in front. Deficient expansion of both bases. Scattered rhonchi throughout both lungs. Congested naso pharynx	·001 ·005 } Jan., 1921	Negative	None	Bronchitis	1. Lost sight of.
2. Age 43	Impaired percussion note right apex. Rhonchi throughout both lungs. Emphysema	·001 ·005 ·01 } March, 1921	Negative	Temperature: 100, and slight local reaction after ·01. No focal or general reaction	Bronchitis. Not active tubercle	2. Lost sight of.
3. Age 58	Impaired percussion note to second rib. In front and fifth dorsal vertebra behind, with blowing breath sounds, emphysema	·001 ·005 ·01 } Jan., 1921	Negative for T.B. Positive for albumin	No reaction	Diagnosis not complete	3. Died 4th May, 1921. "Cerebral hæmorrhage."
4. Age 38	Impaired percussion note over right side. Scattered rhonchi throughout right side. Râles both bases. Emphysema	·001 ·005 ·01 } July, 1921	Negative	Local reaction to ·01, with temperature of 99·2	Quiescent tuberculosis. Pleurisy, bronchitis, emphysema	4. Lost sight of.
5. Age 28	Slightly impaired percussion note over right lung. Poor respiratory murmur. Nasal obstruction	·001 ·005 ·01 } Nov., 1921	Negative	Local reaction to ·01	Probably quiescent tuberculosis, pleurisy	5. No evidence of tuberculosis.
6. Age 27	Impaired percussion note over left apex	·001 ·005 ·01 } Sept., 1921	Negative	Temperature: 99 after ·01, ·001, ·005. No focal reaction	No evidence of active tubercle	6. Lost sight of.
7. Age 36	Impaired percussion note left apex in front and left lower apex behind with harsh inspiration *X Ray.*—Enlargement of bronchial glands both roots	·001 ·005 ·01 ·01	Negative for T.B. Positive for albumin	Moderate local reaction and headache after the second ·01. No focal reaction	Not pulmonary tuberculosis	7. Condition stationary. Full work.

TABLE IV.—SHOWING THE APPLICATION OF TUBERCULIN TO THE DIAGNOSIS OF DOUBTFUL CASES IN 1922.

NOS.	PHYSICAL SIGNS	TUBERCULIN	SPUTUM	REACTION	DIAGNOSIS	AFTER HISTORY, FEBRUARY, 1925
1. Age 42	Greatly diminished expansion of left lung. Bronchitis. *X Ray.*—Indicates chronic bronchitis	·001 ·005 ·01 May, 1922	Negative	None	Chronic bronchitis	1. No evidence of tuberculosis.
2. Age 41	Bronchitis and emphysema	·0002 ·001 ·005 ·01 March, 1922	Negative	None	Bronchitis No evidence of active tuberculosis	2. Died 29th March, 1923. Chronic bronchitis and heart failure.
3. Age 51	Bronchitis and emphysema	·0002 ·001 ·005 ·01 March, 1922	Negative for T.B. Positive for albumin	None	Bronchitis. No evidence of active tuberculosis	3. Died 5th January, 1923. Certified acute pulmonary tuberculosis.
4. Age 16	Mediastinal new growth, pressing the heart to the left. Heart dilated, especially left side *X Ray.*—Reports showed slow growth over a period of four months	·0002 ·001 ·005 ·01 August, 1922	Negative for T.B. Positive for albumin	General reaction after ·005cc, slight local, no focal	Mediastinal neoplasm	4. Died of mitral stenosis., 1924.
5. Age 53	Bronchitis *X Ray.*—Fibrosis on both sides. Calcified foci at the roots and one in right lower lobe	·001 ·005 ·01 Sept., 1922	Negative	None	Bronchitis. No evidence of active tuberculosis	5. Sputum positive for tuberculosis. Patient in Baguley Sanatorium.
6. Age 47	Impaired note right apex in front; left apex behind. Bronchitis	·001 ·005 ·01 May, 1922	Negative to T.B. and albumin	None	Bronchitis No evidence of active tuberculosis	6. Died 24th April, 1923. Chronic bronchitis.
7. Age 67	Poor percussion note over left apex. Bronchitis both bases. Mitral stenosis. B.P. 120	·0002 ·001 ·005 ·01 August, 1922	Negative to T.B. Positive albumin	None	Bronchitis	7. Died 19th September, 1922. ? Heart failure.
8. Age 21	Impaired percussion note over left apex in front and behind. Harsh breath sounds over left front and base *X Ray.*—Heavy fibrosis both roots. Few calcified foci	·0002 ·001 ·005 ·01 Sept., 1922	None	None	No evidence of active tubercle	8. Address unknown. Left district.
9. Age 41	Respiratory murmur weak over left apex. Larynx congested	·0002 ·001 ·005 ·01 March, 1922	None	None	Chronic laryngitis	9. Left district. Cannot trace.
10. Age 20	Impaired percussion note left apex front and back. Few creps. *X Ray.*—No evidence of any tuberculosis	·075 July, 1922	None	Doubtful focal reaction	No evidence of active tubercle	10. No evidence of tuberculosis. Full work.
11. Age 41	Dullness over right apex behind with prolongation of expiration *X Ray.*—Few calcified glands both roots. Apices clear. B.P. 140	·001 ·01 March, 1922	Negative for T.B. Positive albumin	None	No evidence of active tubercle	11. No evidence of tuberculosis.
12. Age 31	Slightly impaired percussion note both apices in front. Transient creps right apex	·001 ·005 June, 1922	None	After ·001 doubtful focal reaction. Faint creps right apex end of inspiration	Absconded before diagnosis was complete	12. Bedfast and under medical attention.
13. Age 57	Few creps at right apex at inspiration persistent. Harsh respiratory murmur left apex. Bronchitis	·001 April, 1922	Negative	None	Bronchitis No evidence of active tubercle	13. Patient has left district. Cannot trace.

TABLE V.—SHOWING THE APPLICATION OF TUBERCULIN TO THE DIAGNOSIS OF DOUBTFUL CASES IN 1923.

NOS.	PHYSICAL SIGNS	TUBERCULIN	REACTION	SPUTUM	DIAGNOSIS	PRESENT CONDITION, FEBRUARY, 1925
1. Age 27	Slightly impaired note left apex behind. Breath sounds very weak both sides. Hysterical dyspneoa.	·002 ·001 ·005 ·01 } January, 1923	None	Negative	Hysteria	No evidence of active disease.
2. Age 27	Impaired note right apex in front. Expiration harsh and prolonged over same area	·001 ·005 ·01 ·03 } March, 1923	Local and General reaction after ·03 T 101·4	None	Not active tuberculosis	Disease quiescent. Full work.
3. Age 37	Impaired note left base and apex. *X Ray.*—Showed enlarged bronchial glands and increased root shadows	·001 ·005 ·01 } April, 1923	None	Negative	No active tuberculosis	No evidence of active disease. Full work.

BAGULEY SANATORIUM.

1921–1925.

The total number of cases treated during the period was 5,267. The beds have been increased from 319 to 333 (June, 1922), and are at present allocated 206 for males and 127 for females. The daily average number occupied increased from 307 in the year 1921 to 319 in 1925.

The table below gives the number of patients in hospital each month during the period :—

	1921	1922	1923	1924	1925
January	310	311	304	319	300
February	311	309	310	314	310
March	310	311	311	317	319
April	314	313	311	310	325
May..	308	310	322	317	325
June	313	319	326	319	325
July	302	320	324	317	332
August	305	318	331	309	329
September	307	304	324	310	316
October	314	324	326	310	326
November	301	314	323	309	322
December	291	298	300	296	318

From April, 1924, to February, 1925 inclusive, the number of available beds was 327, owing to the relaying of the floor in one of the wards.

The treatment of patients is on modern sanatorium lines ; the advanced cases are made as comfortable as possible, and symptomatic treatment encourages these to remain for long periods.

Certain special methods of treatment have been tried :—

Tuberculin-antigen-Scheitlin, after a thorough trial, was discarded as of little value.

Phagsolysine was tried, but it is a very expensive method of treatment, and the results do not justify its wide application.

Krysolgan was used, and appeared to be of some value. Great caution is necessary if severe reactions in the pulmonary lesion are to be avoided.

The results of treatment with *Displyte Vaccine* agree with other observers.

Auto-inoculation with pleural fluid has been tried, but is a procedure not without risk.

Those found of most value were artificial pneumothorax, hypodermic injections of colloidal calcium and pneumosan.

Nursing Staff.—The numbers have been increased from a total of 38 to 50, and the hours worked have been reduced from 67 to 56 per week. The teaching and training of probationers has been brought up to date, and candidates are prepared for the certificate granted by the Society of Superintendents of Tuberculosis Institutions. All nurses receive systematic lectures in tuberculosis.

Clerical Staff.—The combined positions of Superintendent's Clerk and Dispenser has now been made into two appointments.

Domestic Staff has remained the same.

Extensions and Alterations.

1921. Erection of a new electrical generating set.

Building of a garage.

1922. New day rooms for male and female patients were completed and furnished.

Ward 1 was redecorated and opened as a sisters' home, giving each sister a large bed-sitting room.

The nurses' dining room was enlarged.

A shelter was opened between wards 4 and 5, and the ward used as a day room returned to its original purpose.

A new greenhouse was erected to provide occupational treatment for old fibrotic cases in inclement weather.

1923. Additional means of escape in case of fire were provided on wards 2, 3, 4, 5, and the administrative block.

1924. The complete renewal of the electrical storage batteries was carried out.

A new cinematograph machine and fireproof chamber were installed.

The roadways throughout the sanatorium were resurfaced with tar macadam.

1925. The much-needed extension to the kitchen was completed.

Additional accommodation for domestic staff was provided by adding a third story to a portion of the administrative block.

This addition allowed a number of rooms to revert to their original purpose, viz., bedrooms for nursing staff.

The radiological room was completed and the apparatus installed.

The above is a brief survey of the most important changes that have taken place during this period.

H. G. TRAYER.
Medical Superintendent.

MONSALL HOSPITAL.

REPORT FOR 1925.

By Dr. D. SAGE SUTHERLAND, Medical Superintendent.

During the year 1925 there has been a somewhat increased demand for beds for patients at Monsall Hospital.

The total number of patients admitted was 4,074, an increase of 1,101 on the previous year. 486 cases were found to be suffering from diseases other than that certified.

All the wards were in continuous use throughout the year with the exception of ward 6, which was in process of reconstruction for the provision of diphtheria and scarlet fever observation wards, receiving rooms, enquiry rooms, and visitors' robing rooms.

The average daily number of patients was 453·5, as against 359·1 in 1924.

The average period of stay in hospital of the patients was 40·6 days.

The death rate for all cases was 5·37 per cent., as against 7·2 per cent. in 1924.

SCARLET FEVER.

The number of patients admitted was 2,269, as against 1,406 in 1924, an increase of 863. The discharges were 2,265 and the fatalities 53, giving a death-rate of 2·28 per cent., as against 2·44 per cent. in 1924.

The average stay in hospital for patients who recovered was 44·5 days, and for fatal cases 13·5 days.

Ninety-five cases certified as scarlet fever were found to be suffering from diseases other than that certified. Three cases were fatal. Thirty of these cases were found to be suffering from tonsillitis, 19 from rubella, and the remainder comprised cases of measles, pneumonia, serum and food rashes, dermatitis, chickenpox, etc.

Return Cases.—The number of alleged infecting cases, which gave rise to 90 secondary cases out of a total of 2,265 discharges, was 76, giving a return case rate of 3·35 per cent.

During the year 1925 a bed isolation ward for doubtful cases of scarlet fever, cases of scarlet fever complicated with other infections, and infectious diseases for which special wards were not provided, was brought into use. A special ward was also exclusively equipped for the treatment of ear complications occurring during convalescence from scarlet fever, with a side room furnished to afford the visiting aural surgeons an operating theatre and dark room immediately accessible to the ward. No case has been discharged prior to the cure of the ear complications. Reports of the work in both these departments are appended.

During the last three months of the year four ultra-violet lamps were installed for the treatment of persisting diphtheritic bacteria infection, as well as for the general treatment of complications of scarlet fever, etc.

A series of investigations were made as to the value of the "Dick" test for susceptibility, of the rash extinction test as a means of the diagnosis of scarlet fever, also the use of scarlet fever antitoxin in the treatment of severe cases of the disease. The results proved of so valuable a nature that these lines of investigation and treatment have come into general use in the scarlet fever wards.

A discharge ward for cases of scarlet fever was opened towards the end of the year for the reception of cases of scarlet fever from the general wards before return to their homes, thus ensuring that each patient spends at least two days in non-infections surroundings before leaving the hospital. In twenty-nine cases chronic enlarged and unhealthy tonsils were removed.

DIPHTHERIA.

The number of patients admitted was 854, as against 455 in 1924, an increase of 399. Discharges were 767. Seventy deaths occurred, giving a fatality rate of 8·36, as against 11·28 in 1924. Twenty-four of the deaths occurred within 48 hours after admission. The cases were of a more severe nature than in the previous year, and the lessened mortality is attributable to the more frequent use of antitoxic serum given by the intra-venous method of administration in the more severe type of case.

The average stay in hospital for patients who recovered was 42·5 and for fatal cases 7·7 days. No case of diphtheria was discharged from hospital under 28 days.

Tracheotomy was performed in 29 cases, of whom 14 died, giving a mortality rate of 48·27 per cent., against 71·42 per cent. in 1924.

One hundred and twenty-three cases certified as diphtheria were found to be suffering from diseases other than that certified. Of these cases three were fatal. The majority of these cases were found to be tonsillitis, and among the remainder the most numerous were cases of simple laryngitis, follicular tonsillitis, and pharyngitis. None of these patients contracted diphtheria while in hospital.

ENTERIC FEVER AND PARATYPHOID FEVER.

The number of cases admitted was 37. Of these, 16 were due to one outbreak of paratyphoid fever occurring in a hospital, all of which recovered. The discharges were 49, and one death occurred, giving a case fatality rate of two per cent. During the year 1924, among 63 cases, the death-rate was 12·69 per cent.

The average stay in hospital of patients who recovered was 61·4 days, and for fatal cases 2·2 days.

One hundred and twenty specimens were examined for the presence of typhoid bacilli in the urine.

ERYSIPELAS.

There were 179 cases admitted, an increase of 66 over 1924, and 159 were discharged. Twenty-two patients died, giving a mortality rate of 12·86, as against 9·56 in 1924.

MEASLES.

One hundred and five cases were admitted, and 78 were discharged. Five deaths occurred, giving a fatality rate of 6·41 per cent.

PUERPERAL FEVER.

The number of admissions was 144, an increase of 46 on the previous year, and the number of discharges 124. Twenty-three deaths occurred, giving a case mortality of 15·23 per cent., as against 18·9 per cent. during the year 1924. Ten deaths occurred within 24 hours of admission.

The average duration of stay in hospital of those who recovered was 26·47 days, and of those who died 14·63 days.

The average day of disease on admission was the fifth.

Seventy-seven infants were admitted with their mothers. Two died, and the remainder had a duration of stay in hospital of 30·22 days. About three-quarters of the infants were breast fed.

Besides general treatment, special treatment on the lines laid down by the Medical Research Council was carried out. These comprise lymph drainage of the uterus by glycerine-iodine irrigation for the local cases, and, for the blood infections, intra-venous injections or arsenical preparations and immuno-transfusion. In this connection 748 glycerine-iodine irrigations were performed (an average of five per patient), 16 patients were treated with arsenical injections, and four received immuno-transfusion.

In addition, 38 cervical cultures and 48 blood cultures were examined, and 10 patients had their blood typed with a view to possible transfusion.

OTHER DISEASES

There were 470 admissions and 434 discharges, as against 546 admissions and 498 discharges in 1924. Forty-seven deaths occurred, giving a death-rate of 9·77 per cent., as against 8·29 per cent. in 1924.

In this category are included 32 cases of encephalitis lethargica (among whom there were four deaths, giving a death-rate of 11·1 per cent.), also cases of infants admitted with mother, whooping cough, chickenpox, mumps, cerebro-spinal fever, and poliomyelitis.

Twenty cases certified as encephalitis were found to be suffering from a disease other than that certified. Attached is a table indicating the nature of the diseases simulating encephalitis lethargica on admission.

MALNUTRITION CASES.

The eight cots of the Crèche were fully occupied throughout the year with children suffering from malnutrition or rickets. There were 16 admissions and 17 discharges.

OPERATIONS AND CONSULTATIONS.
GENERAL AND GYNÆCOLOGICAL SURGEONS.

The gynæcological surgeons were called in for operations on six occasions, for consultations on four occasions, and for examinations under anæsthetic on three occasions.

The general surgeons were called in for operations on four occasions and for consultations on 15 occasions.

TABLES FOR 1925.

Table showing Numbers of Various Diseases Treated.

Disease	Remaining in Hospital, Jan. 1st, 1925	Admitted	Discharges and Deaths	Remaining in Hospital, Dec. 31st, 1925
Scarlatina	225	2269	2318	176
Diphtheria	168	854	837	185
Enteric Fever*	16	37	50	3
Erysipelas	16	179	181	14
Puerperal Fever	18	144	151	11
Measles	2	105	78	29
Other Diseases	36	486	498	24
Total...............	481	4074	4113	442

* Including paratyphoid fever.

Complications in Scarlet Fever.

Complication	Number	Percentage
Rhinorrhœa in Convalescence..	149	6·42
Otorrhœa	225	9·7
Nephritis	21	0·93
Albuminuria of Convalescence..	104	4·6
Adenitis and Abscess	7	0·31
Endocarditis	5	0·22

DIPHTHERIA.

Age of Patients	MALE		FEMALE		TOTAL	
	Cases	Died	Cases	Died	Cases	Died
Under 1 year	7	...	6	1	13	1
1 to 2 years	17	2	16	2	33	4
2 ,, 3 ,, ...	29	4	21	4	50	8
3 ,, 4 ,, ...	29	2	33	6	62	8
4 ,, 5 ,, ...	40	5	47	6	87	11
5 ,, 10 ,, ...	156	14	170	16	326	30
10 ,, 15 ,, ...	53	2	92	2	145	4
15 ,, 20 ,, ...	16	...	41	2	57	2
20 ,, 25 ,, ...	8	...	23	...	31	...
25 ,, 30 ,, ...	7	...	6	...	13	...
30 and over	6	1	14	1	20	2
Total	368	30	469	40	837	70

The case mortality per cent. was :—Males, 8·1 ; Females, 8·5—Total, 8·4.
24 deaths occurred within 48 hours of admission.
Of the deaths, 1 was complicated by other coexistent diseases

TRACHEOTOMY CASES.

Age of Patients	No. of Patients	Died	Mortality per cent.
Under 1 year	1	...	...
1 to 2 years	1	1	100·0
2 ,, 3 ,, ...	4	3	75·0
3 ,, 4 ,, ...	5	2	40·0
4 ,, 5 ,, ...	6	3	50·0
5 ,, 10 ,, ...	12	5	41·6
10 ,, 15 ,, ...	...	...	...
15 and over	...	...	...
Total	29	14	48·27

Of the deaths, 5 occurred within 48 hours of admission.

OTHER DISEASES ADMITTED AS ENCEPHALITIS LETHARGICA.

	Discharges	*Deaths*
Cerebral abscess	1	—
Nil abnormal	1	—
Cerebral hæmorrhage	1	1
Post encephalitic tumour	1	—
Constipation	1	—
Pulmonary tuberculosis and tuberculous meningitis	—	1
Tuberculous meningitis	—	9
Acute bronchitis	—	1
Cerebral tumour	—	1
Cerebral thrombosis	—	1
Otitis media and leptomeningitis	—	1
Pneumococcal meningitis	—	1

REPORT OF CASES TREATED IN THE BED ISOLATION WARD.

NINETEEN BEDS AVAILABLE.

Nature of Cases	*No. of Cases*
Scarlet fever	18
,, ,, doubtful (observation for 21 days)	78
,, ,, septic	3
,, ,, and diphtheria	13
,, ,, and whooping cough	8
,, ,, whooping cough and diphtheria	1
,, ,, diphtheria and rubella	1
,, ,, and measles	1
,, ,, and pneumonia	2
,, ,, and ringworm	1
,, ,, and psoriasis	1
,, ,, and vaginal discharge	1
,, ,, and impetigo contagiosa	1
,, ,, contact with chickenpox	1
Diphtheria (including rhinitis and doubtful serum rashes)	28
,, and typhoid fever	1
,, and paratyphoid b. fever	1
,, and parotitis	1
,, and chickenpox (including two doubtful)	3
,, contact with scarlet fever	1
,, ,, ,, measles	4
,, and scabies	5
Rubella	14
Parotitis	2
Whooping cough	1
,, ,, and pneumonia	1
Measles (late)	1
,, ,, and pneumonia	1
Chickenpox (late)	1
Lobar pneumonia	2
Tonsillitis	2
Influenza	1
Total cases	200

Contact cases infected before admission and developing an additional infection in the bed isolation ward.

One case of rubella (two days after admission).
,, ,, whooping cough (seven days after admission).
,, ,, chickenpox (11 days after admission).
,, ,, measles (six days after admission).

Cases developing an additional infection in the ward :—

Five cases of scarlet fever developed K.L.B. rhinitis or ear infection.

Three cases of diphtheria developed scarlet fever.

One case of diphtheria developed chickenpox. (The only possible source of infection was a patient with only a few residual scars.)

LABORATORY REPORT.

Cultures from throat, nose, and ear	21,440
,, ,, vagina	8
,, ,, uterus	138
Widal reactions—B. Typhosus ,, ,, Para. A ,, ,, Para. B	113
Typhoid stools	120
,, urine	116
Examination of spinal fluid	32
,, ,, pus	3
,, ,, sputum..	14
Smears from throat	120
Urine, bacilluria, nephritis	21
Various fluids	2
Total	22,127

Of cultures from nose, throat, and ear, the following were positive for diphtheria bacilli :—

Throat	757
Nose	1,093
Ear	247
Total	2,097

AURAL REPORT.

1st January to 31st December, 1925.

Number of scarlet fever cases—males 1,088, females 1,230; total 2,318.

Number of cases in whom otorrhœa occurred:—

Males	125	= 11·5 per cent.
Females	100	= 8·1 ,,
Total ..	225	= 9·7 ,,

Average day of disease on onset of otorrhœa—16·4.

Average duration in days of otorrhœa—24·8.

Average age of patients in years—5·5.

Removal of tonsils and adenoids or adenoids only in cases of otorrhœa—62 cases.

Average duration in days of otorrhœa after tonsil and adenoid operations—8·1.

Average stay in hospital of patients developing otorrhœa in whom tonsil and adenoid operations performed—59·3 days.

Average stay in cases not operated on—65·3 days.

Number of mastoid operations—22 (two deaths).

Percentage of mastoid complications occurring in otititis media—9·8.

Average day of disease of mastoid complications—34·5.

Average day of otorrhœa on which mastoid complication arose—20th.

Primary paracentesis operation was performed in 10 cases.

Schwartze's operation was performed in 17 cases.

Radical operation was performed in five cases.

Mastoid operation by Wilde's incision was performed in three cases.

Average time for healing of wound after operation—44½ days.

It is only recently that a systematic attempt has been made to treat the aural complications of infectious disease at Monsall Hospital. It is as yet too early to express any decided opinions from our short experience. However, two definite statements regarding the suppurative otitis media occurring for the first time during an attack of scarlet fever can be made, and there is little doubt that further experience will confirm them very decidedly.

They are :—

(1) Except in the few cases of massive necrosis of the temporal bone (which are presumably due to embolic infection) the persistence of otitis media is due to infected adenoids and tonsils. Hence it seems to us quite justifiable to remove adenoids and tonsils very thoroughly in every case of aural catarrh or suppuration. It is certainly true that very few cases of suppuration persist if this is done.

(2) Mastoid infections have been comparatively rare, due to the systematic way in which the suppurating ear is treated by the nursing staff.

It will be noted that the proportion of aural complications is rather greater than is the experience of the Metropolitan Asylums Board Fever Hospitals during the year 1924-25, where the corresponding figures are 1,356—114, giving a percentage of 8·4 cases of otorrhœa.

The average duration in all cases of otorrhœa was 24·8 days, whilst in 1924 it was 39·9. This shortening of the duration seems to correspond to the increased attention given to patients suffering from ear troubles, and more especially to the concentration into one ward and provision of special equipment.

The routine adopted recently in the acute stage has been the instillation of hydrogen peroxide, complete drying of the ear by the cotton wool mop, and then instillation of drops of glycerine or carbolic acid. When the acute stage has subsided the second drops are replaced by spirit drops of various kinds.

No syringing is allowed except under exceptional circumstances, and it is the opinion of the ear surgeons that this omission of syringing has materially improved results. In the more chronic cases they have found that the packing of the meatus down to the middle ear with narrow gauze soaked in a 1/200 solution of mercurochrome is of considerable value.

The operation of paracentesis has been rarely performed, for the following reasons :—

(1) The otorrhœa has usually been so rapid that permission for operation is difficult to obtain in time.

(2) The operation is of doubtful utility in cases of scarlet fever where necrosis is extensive.

The number of tonsil and adenoid operations (62) is not so great as will be the case in future years. The average duration of aural discharge (8·1 days) after operation is so remarkably small that it would seem advisable to remove tonsils and adenoids far more frequently and at a much earlier stage. Hitherto the indication for tonsil and adenoid removal has been any condition observed (general or local) tending to cause persistence of the ear discharge, having regard to the fact that a laige percentage of these cases tend spontaneously to cure without operative interference of any kind.

It may be taken for granted that if removal of tonsils and adenoids, together with the routine treatment as described above does not effect a cure within three weeks, there is some bony infection demanding the mastoid operation. This statement refers to cases showing no acute signs.

The number of mastoid operations (22) is not large, being not quite 10 per cent. of the cases of discharging ears. They are chiefly operations of urgency, as every effort has been focussed on preventing the incidence of this complication by systematic treatment.

At the City Hospital, Edinburgh, the late Dr. Claude B. Kerr reported in 1923 that he had succeeded in reducing the period of deletion of otorrhœa cases by nearly 20 days as a result of the removal of tonsils and adenoids in all patients if the discharge did not cease in about a fortnight, and that he did not now wait so long. In nine out of ten cases the ears were dry within a fortnight of operative interference. Mastoids were not frequent—about one dozen in 1,500 cases at the outside.

The incidence of mastoid complication in all cases of scarlet fever at Monsall Hospital is ·95 per cent. against ·8 per cent. at Edinburgh.

The liability to the occurrence of diphtheritic germ infection among patients in a scarlet fever aural complication ward has rendered it essential to carry out the nursing by rigid bed isolation methods, and in charge of medical officers thoroughly experienced in the nature of infectious diseases. Prophylactic anti diphtheritic serum has been administered to all cases prior to operation, and no patient has developed diphtheria during the year. As every case of scarlet fever is now "Dick" tested on admission, the risk of secondary infection is reduced to a minimum. It has been found necessary to culture the throat and nose of all cases prior to the removal to the ear ward as an additional precautionary measure.

The following are the statistics for the six months ended December, 1924 :—

Total cases of scarlet fever admitted..	941
Number of cases of otorrhœa	97
Average day of commencement of otorrhœa	18th
Average duration of otorrhœa	40 days
Number of tonsil and adenoid operations..	40
Average duration of otorrhœa after operation.. ..	11
Number of mastoid operations	8

REPORT ON PUERPERAL FEVER.

The following is a report on cases of puerperal infection treated in Monsall Hospital by lymph-drainage of the uterus, for the local condition, and by this method combined with chemo-therapy and immuno-blood transfusion for the acute blood infections.

There was a good deal of variation in the type of case admitted, but the majority of the cases on admission were acutely ill.

In the first 100 cases treated—

65 were multiparæ.

35 were primiparæ.

Of these—77 were full-term labours;

1 was a premature labour;

14 were complete abortions; and

8 were incomplete abortions.

In 28 of the cases there was a history of interference before admission, including forceps deliveries, version, craniotomy, manual removal of placenta, and one case of criminal abortion.

On admission to hospital—

14 cases had very severe extra-uterine injuries;

15 cases had severe extra-uterine injuries; and

29 cases had slight extra-uterine injuries.

The percentage mortality was 13 per cent.

No conclusions of great value as to the efficacy of the treatment can be drawn from this mortality rate, because during the period from which this series was collected much of the treatment of the acute general blood infections was in a very experimental stage; further, other factors, over which we have no control, tend to raise or lower the mortality rate. A short analysis of this series of deaths will serve to illustrate this. It may be noted, however, that every fatal case with one exception was desperate from the moment of admission.

Case 1.—A. W. Primip. Forceps delivery. Admitted third day of disease. V. severe local injuries. Hæmolytic streptococcic septicæmia. Streps. present in uncountable numbers per c.c. Died five days after admission.

Case 2.—C. Primip. Admitted second day of disease. All mucous membranes blanched, semi-comatose, very severe local injuries, retained placenta, chronic endocarditis, bronchitis. Died nine days after admission.

Case 3.—E. Multip. Admitted sixth week of disease. Desperately ill. Acute secondary anæmia. Septicæmia—B. Acidi Lactici. Had been acutely ill six weeks. Sent to hospital in final stages. Died 16 days after admission.

Case 4.—E. E. F. Multip. Forceps delivery. Admitted sixth day of disease. V. severe local injuries. Hæmolytic streptococcic septicæmia. Died within 48 hours.

Case 5.—A. W. Primip. Admitted fourth day of disease. V. severe local injuries. Comatose. Died 14 hours after admission.

Case 6.—M. R. Primip. Manual removal of placenta. Admitted third day of disease. General peritonitis. Comatose. Died four hours after admission.

Case 7.—E. M. Primip. Forceps delivery. Admitted ninth day of disease. V. severe local injuries. Wildly delirious. Acute capillary bronchitis—broncho-pneumonia. Died four days after admission.

Case 8.—H. L. Primip. Forceps delivery. Admitted ninth day of disease. Very ill and collapsed. Hæmolytic streptococcic septicæmia. Sudden collapse and death on fourth day after admission.

Case 9.—E. B. Second pregnancy. Abortion. Admitted seventh day of disease with double lobar pneumonia. Died seven days after admission.

Case 10.—E. T. Primip. Admitted thirteenth day of disease. Hæmolytic streptococcic septicæmia. Acute endocarditis. Sudden death from pulmonary embolism. Died 2 days after admission.

Case 11.—E. Mc. Primip. Admitted eighth day of disease. Blanched. Collapsed. Hæmolytic streptococcic septicæmia. Chronic endocarditis. Died 11 days after admission.

Case 12.—F. H. Elderly multip. Admitted twenty-fourth day of disease. Very ill. Chronic endocarditis. Pyæmia. Died 38 days after admission.

Case 13.—S. J. W. Elderly multip. Admitted third day of disease. Died 12 days after admission from ruptured pelvic abscess and general peritonitis.

All these cases showed definite uterine sepsis, but a number of other factors tending to produce a fatal termination were also present, and so it can be seen how many of these conditions might predominate in a short series of cases and completely alter the results on paper, whatever line of treatment was adopted. In comparison with previous series this mortality rate—13 per cent.—is satisfactory.

Notes on the results of the treatment of some of the above cases will be made later on.

The results obtained, both immediate and remote, by treating the septic uterus by lymph-drainage have been uniformly satisfactory.

The immediate results show themselves in the quick relief of pain and by markedly reducing the duration of the pyrexial period, with its accompanying malaise and discomfort. The relief experienced by the patient within a few hours of the commencement of the treatment is most gratifying. The remote results are seen by the increased bactericidal power of the patient's blood as the organism is freed from toxic substances and by a most marked reduction in complications.

In the first 100 cases 691 applications were administered.

As a rule the treatment was only carried out once daily ; in a few exceptionally bad cases twice. There is no doubt, however, that in the bad cases this is not sufficient. Some of the very bad cases ought to be drained three or four times daily for the first few days, and in all cases the treatment must be continued until all signs of active inflammation have subsided. It is a mistake to adopt a routine treatment ; each case must be carefully examined and treated on its own merits.

Of 87 cases who recovered, 22 were very severe—*i.e.*, cases showing very severe local injuries or a very severe toxæmia, or both ; 36 were severe—*i.e.*, cases showing severe local injuries or severe toxæmia, or both ; 27 were moderately severe—*i.e.*, cases showing no local injury, or only a slight one, but exhibiting a moderate degree of toxæmia. Two were mild cases. Only 12 of these patients developed complications, a percentage of 13·7 per cent., which is an extremely low figure.

The average stay in hospital of these 87 patients was 26·2 days, while for several years past the average stay in hospital of patients who recovered has not been below 38 days. This reduction is due to the quicker recovery of the patient from the initial attack and to the absence of subsequent complications.

The analysis of the complications developed by the 12 patients in this series is as follows :—

Arthritis	2
Parametritis and abscess	1
Salpingitis	1
Salpingitis and phlegmasia—one leg	1
Phlegmasia—one leg	2
Cystitis—upward infection	3
Mastitis	1
Facial erysipelas	1
Total	12

The mastitis was a direct infection through a cracked nipple. The patient who developed erysipelas had already been treated for this disease on four previous occasions, which leaves the actual number of internal complications developing as a direct result of the infective condition of the genitals at 10.

The patient who developed the parametritis and abscess was operated on and the abscess drained. She was the only patient who recovered who required any operative interference.

The results of the treatment of the acute blood infections have not been so satisfactory, but nevertheless have been distinctly hopeful.

The treatment has been directed along two lines—

1. The intravenous injection of arsenical preparations as a direct bactericidal agent.
2. The transfusion of immunised blood as a help to the patient's own defensive mechanism.

The arsenical drugs used were Sulfarsenol and Novarsenobillon.

Novarsenobillon has been found to be more efficacious, and the use of Sulfarsenol has now been discontinued.

These drugs were administered in two ways—

1. Small doses of 0·1–0·15 gms. repeated every 24 to 48 hours.
2. Large single doses of 0·6 gms.

The results of the small repeated doses were disappointing; in no case did the patient show any clinical improvement. In one case, however, there was a marked increase in the bactericidal power of the patient's serum, but again in two other cases there was a marked decrease. In no case did the small doses interfere with the leucocytic efficiency. The results of the treatment with the large doses have been more satisfactory. Up to the present only three cases have been treated in this way, but all three showed a dramatic clinical improvement.

All three cases were desperately ill, one of them almost moribund.

In two of the cases no organism could be isolated from the blood, but it is possible that some anærobic strain might have been present. The third case had hæmolytic streptococci circulating in the blood stream, and in this case the immediate results of the injection were most striking.

The results of the bacteriological examinations of the blood in one case are given in detail in appended leaf. They were highly satisfactory.

In the case of the whole blood, 50 c.m. of blood were inoculated with a known number of virulent hæmolytic streptococci and incubated for three hours, and then explanted into blood-agar, and the remaining colonies counted the next day.

In the case of the serum, 25 c.m. of serum were inoculated with 2·5 c.m. of several dilutions of a bacterial suspension of virulent hæmolytic streptococci, the original suspension from which the dilutions were made containing a known number of cocci per c.c. The inoculated serum was incubated for 24 hours, and then transferred to glucose broth and incubated for another 24 hours, and the presence or absence of growth noted (see opposite page).

Of the three cases who received the large dose one received a second dose of 0·6 gms. six days after the first. After this second dose the leucocytes were apparently damaged, and the patient's condition was somewhat worse for about 30 hours, but a subsequent improvement set in, and was maintained for some time, probably on account of an increased bactericidal power of the serum. Work will have to be done on this particular point of repeated large doses. The ultimate results of immuno-transfusion have been very disappointing.

Seven cases have been transfused.

Five cases received 500 c.cs. of blood.

One case received 600 c.cs. of blood; and

One case received two transfusions of 500 c.cs. each. Six out of the seven cases died. Some of these cases also received arsenic in the small doses.

Four were cases of hæmolytic streptococcic septicæmia.

Case P. (0·6 grammes of Novarsenobillon intravenously).

Blood before injection—

No. of streps, implanted in 50 c.m. of blood, 96. No. surviving, 46 (incubated three hours).

No. of streps. implanted in 50 c.m. of blood, 192. No. surviving, 358 (incubated three hours).

Blood six hours after injection—

No. of streps. implanted in 50 c.m. of blood, 108. No. surviving, nil. (incubated three hours).

No. of streps. implanted in 50 c.m. of blood, 216. No. surviving, 27 (incubated three hours).

BACTERICIDAL POWER OF SERUM.

Serum before injection—

Dilution.	Growth.
1/1250	+
1/6250	+
1/31250	—

Serum six hours after injection—

Dilution.	Growth.
1/50	—
1/250	—
1/1250	—
1/6250	—
1/31250	—

The original suspension contained 15,000,000 per c.c.—

Therefore before injection 1 c.c. of serum killed 480 cocci.

Six hours after injection 1 c.c. of serum killed over 300,000 cocci.

One was a case of B. Acidi Lactici septicæmia and one was a staphylococcic septicæmia. The other case was an acute secondary anæmia with a very septic uterus, but no organisms could be isolated from the blood. The case who recovered was the case of staphylococcic septicæmia.

In every case there was a marked improvement in the patient's condition after the transfusion, but it was very transitory.

Examinations of the blood show that the transfusions do good, but alone they certainly will not save life in bad cases. The combination of immuno-transfusion and large dose of Novarsenobillon has not yet been tried, but will be used on the next suitable case.

Two results are given below, showing the immediate benefit from the transfusions—

A. W.—Case of hæmolytic streptococcic septicæmia—

Blood before transfusion—

No. of cocci per c.c. .. .. uncountable.

Twenty-four hours after transfusion—

No. of cocci per c.c. 10

Forty-four hours after transfusion and 30 minutes before death—

No. of cocci per c.c. .. .. uncountable.

F. T.—Case of hæmolytic streptococcic septicæmia—

Blood before transfusion—

No. of cocci in 0·5 c.cs. .. uncountable.

Twenty-four hours after transfusion—

No. of cocci in 0·5 c.cs. .. uncountable, but less.

Forty-eight hours after transfusion—

No. of cocci in 0·5 c.cs. .. 25

This patient died suddenly from pulmonary embolism.

THE CLINICAL VALUE OF THE "DICK" AND "SCHULTZ CHARLTON" TESTS IN DIAGNOSIS.

The year 1925 has seen a definite advance in the diagnosis and treatment of scarlet fever owing to the introduction of the "Dick" and "Schultz Charlton" tests and to the employment of an antitoxin for the disease. It is not claimed that the two tests referred to are infallible, but sufficient evidence has been accumulated in Monsall Hospital to show that they have a very high value and that they have come to stay.

The "Dick" test is employed routinely on all patients admitted to hospital suffering from scarlet fever or from diphtheria. A positive "Dick" reaction is expected in all cases of scarlet fever during the acute stage, and in the first or second week of the disease in the great majority of cases, although a negative test does not rule out the disease. Consequently a negative test early in the disease causes the physician to adopt a more critical attitude towards the case. The test, however, has greater value if it is used at regular intervals during the course of the disease, as a transition from a positive to a negative result within approximately a fortnight or three weeks practically clinches the diagnosis.

The following illustrative statistics have been compiled by taking the results of 102 "Dick" tests in successive scarlet fever patients at different stages of the disease. It may be noted that it occasionally happens that a test is obscured by a specially brilliant rash. This happened in three cases, while in a fourth the reading was rendered doubtful by the simultaneous appearance of a serum rash.

Day	Result Positive	Result Negative	Result Obscured	Total
1 ..	6	1	—	7
2 ..	23	9	3	35
3 ..	11	6	—	17
4 ..	11	6	—	17
5 ..	1	2	—	3
6 ..	—	1	—	1
7 ..	2	1	—	3
Totals for week ..	54 (65%)	26 (31·3%)	3 (3·7%)	83

Day	Result Positive	Result Negative	Result Obscured	Total
8 ..	1	1	—	2
9 ..	1	—	—	1
10 ..	1	1	—	2
11 ..	1	—	1	2
12 ..	1	2	—	3
13 ..	—	—	—	—
14 ..	—	—	—	—
Totals for second week	5 (50%)	4 (40%)	1 (10%)	10

Day	Result Positive	Result Negative	Result Obscured	Total
15 ..	—	2	—	2
16 ..	—	3	—	3
17 ..	—	1	—	1
18 ..	—	2	—	2
19 ..	—	—	—	—
20 ..	—	1	—	1
21 ..	—	—	—	—
Totals for third week.	—	9 (100%)	—	9

The value of the test in the corroboration of a changed diagnosis is shown in the following short series of cases interspersed among the records from which the last table was compiled :—

Case	Disease Notified	Diagnosis changed to	Day of Disease when First "Dick" Test performed	Result	Day of Disease when Second "Dick" Test performed	Result
1	Scarlet Fever ...	Erythema ...	5	Negative	—	—
2	,, ...	Rubella ...	3	Negative	18	Negative
3	,, ...	Erythema ...	3	Positive	18	Positive
4	,, ...	Otitis Media	4	Positive	19	Positive
5	,, ...	Rubella ...	5	Negative	—	—

In the case of diphtheria the test has some use in reference to the control of cross infection. Serum rashes and enema rashes have not infrequently a scarlatiniform appearance. In such cases a diagnosis of these eruptions may be more confidently made in patients who have been known to give previously a negative " Dick " reaction. On the other hand, the presumption that the patient may have scarlet fever is strengthened by a previous positive reaction. Again, when scarlet fever has broken out in a diphtheria ward, special observation and isolation may be given to those who are known to be susceptible to scarlet fever as shown by the " Dick " test.

THE "SCHULTZ CHARLTON" TEST.

In this test a small quantity of antitoxin is introduced into the skin in suitable dilution, the site chosen being usually the chest or abdominal wall. In definite cases of scarlet fever at the eruptive stage, a definite blanching is produced at the site on inoculation. It may be said that the occurrence of blanching is diagnostic, but certain points have to be kept in view. In simple types of scarlet fever good results are invariable, these being most prominent in the more severe cases with brilliant rashes. In the later stages of the eruption, when staining may be a prominent feature in certain cases, blanching will naturally not appear.

In the septic type of the disease it has been noted that the results were generally inferior, probably due to the more fixed nature of the rash.

The following table gives the results of the rash extinction test in 25 cases certified as scarlet fever. Five of these cases were of a doubtful nature.

For the purpose of the test three batches of serum were used, namely :—

Dochez serum.

Burroughs Wellcome, Batch 4,177.
" " " 4,196.

Each batch was supplied in five dilutions—1/10, 1/100, 1/200, 1/500, 1/1000. Two different dilutions of each serum, which were varied in each case, were tested, so that each patient received six tests.

The amount of serum injected by the intra-dermal method was ·2 of a c.c. It was found that in 20 consecutive cases of undoubted scarlet fever, within the first three days of the rash, all dilutions used experimentally reacted, producing fading of the eruption in a circumscribed area about the size of a two-shilling piece, the blanching persisting during the duration of the eruption. In five doubtful cases of scarlet fever with indistinct rashes the reaction was found negative in all the experimental dilutions tested. In these cases the absence of subsequent clinical symptoms confirmed the negative tests.

Thus it will be noted that in definite cases of scarlet fever a positive test is confirmatory of the clinical diagnosis, and that in cases where some doubt exists as to the nature of the eruption a negative diagnosis of scarlet fever will be strengthened by the non-appearance of the blanching reaction.

Further evidence of the negative nature of these cases was obtained by using the patients' own convalescent serum for testing cases of undoubted scarlet fever in the same manner during the first three days of the rash.

"SCHULTZ CHARLTON" REACTION.

Case	Day of Disease	Day of Rash	Type	Reaction	Notes
1	3rd	2nd	Sc. F. Anginosa	+12 hrs. +24 hrs.	Desquamation
2	3rd	3rd	,, Simplex	+—18 ,, +24 ,,	,,
3	2nd	2nd	,, ,, ...	+36 ,, +48 ,,	,,
4	4th	3rd	,, Anginosa	+18 ,, —	Desquamation Nephritis
5	—	2nd	,, Simplex	+24 ,, +36 ,,	Desquamation
6	1st	1st	,, ,, ...	+12 ,, +24 ,, +36 ,, +48 ,,	,,
7	2nd	1st	,, ,, ...	+12 ,, —	,,
8	2nd	2nd	,, ,, ...	+12 ,, —	Desquamation Albuminura
9	32nd	1st day of secondary rash	,, ,, ...	+18 ,, —	Desquamation a second time (relapse of S.F.)
10	3rd	3rd	,, Anginosa	+24 ,, +36 ,,	Desquamation
11	1st	1st	,, Simplex	+12 ,, —	Desquamation (Post Diphtheria S.F.)
12	3rd	2nd	,, ,, ...	+24 ,, —	Desquamation
13	3rd	3rd	,, ,, ...	+24 ,, +36 ,,	,,
14	3rd	3rd	,, ,, ...	+24 ,, —	,,
15	2nd	2nd	,, ,, ...	+18 ,, —	,,
16	2nd	2nd	,, ,, ...	+—18 ,, +24 ,,	Desquamation Albuminura
17	3rd	3rd	,, ,, ...	+—24 ,, +36 ,,	Desquamation
18	2nd	2nd	,, ,, ...	+18 ,, —	,,
19	3rd	2nd	,, ,, ...	+24 ,, —	,,
20	2nd	2nd	,, ,, ...	+18 ,, —	,,
21	1st	1st	Indefinite Rash	No Reaction	No subsequent signs
22	2nd	2nd	,, ,, ...	,,	No subsequent signs
23	4th	2nd	Scarlatiniform	,,	Rubella
24	—	2nd	Erythematous. (Patient exposed to Sc. F.)	,,	Serum rash. 8th day after antitoxin
25	—	1st.	Punctiform erythema...	,,	Enema rash. Case of Diphtheria

+ — Indicate indefinate reaction

ANTITOXIN IN THE TREATMENT OF SCARLET FEVER.

It is in the natural sequence of events that antitoxin should now be used in the treatment of scarlet fever. Owing to the mild type of scarlet fever at present prevalent, the use of antitoxin has been confined to the few severe cases. In early severe uncomplicated cases, good results invariably follow, especially if the antitoxin is used early in the disease. In toxic types, fortunately rare, the value is doubtful, but sufficient evidence is not available from the records, while in septic types results on the whole were not very notable, but this is more or less to be expected as the sepsis is due to superimposed infection by other organisms.

During the short period from which these records were compiled, seven cases were treated with antitoxin.

A short note of each is given, as the results were characteristic.

Case 1.—Toxic type. Antitoxin on the second day. Death on the fourth day.

Case 2.—Severe uncomplicated type. Antitoxin on admission. Improvement manifested by fall of temperature and pulse rate in 24 hours, and rapid convalescence.

Case 3.—A similar type. Record states "Very marked immediate improvement."

Case 4.—A similar type, with a similar result.

Case 5.—A severe type with prominent anginal feature. Improvement in 24 hours. No complications. Discharged on thirty-fifth day.

Case 6.—A surgical case arising from a septic toe. On admission marked lymphargitis and abscess formation extended up to the thigh. Antitoxin given immediately and incisions made. Uneventful recovery. Prognosis on admission was very grave.

Case 7.—A severe uncomplicated type. Immediate marked improvement with critical fall of temperature.

SCARLET FEVER IMMUNISATION.

A commencement was made in this work by the selection of 14 children and one adult, all of whom gave a definitely positive "Dick" reaction. Four of these children were at the time of inoculation of an average healthy type, with no history of previous infectious disease. Of the others, 10 were suffering from mild attacks of diphtheria, and had all been treated with diphtheria antitoxin on admission. The remaining case was a fever nurse, 19 years of age. In the case of the children the ages varied from 11 months to 7 years. At the commencement the routine was to give four inoculations at four or five-day intervals, the initial injection being 500 skin doses and the last injection 2,500 skin doses of scarlatinal toxin. Later the initial dose was increased to 500 and the last dose to 3.500, and in the case of the nurse 5,000 skin doses.

Reactions.

On the whole it may be said that very little local or general disturbance was noted. In the case of the four healthy children—*i.e.*, the four youngest children inoculated—there was never more than a mild local reaction, even with the bigger doses, slight erythema and induration being produced. The reaction did not show any tendency to increase or decrease with successive doses. The children suffering from diphtheria, however, showed definitely a more severe response, doubtless due to a lowering of resistance by concurrent disease. The erythema and induration were more marked, and covered approximately an area equal to half-a-crown with the early injections, and tended to be less with subsequent injections. In the adult treated, the local reactions were on the whole rather more extensive than those noted in any of the children. Constitutional reactions were entirely absent in nine of the cases. Two showed slight pyrexia and associated acceleration of the pulse rate, but little or no malaise. Two, in addition to these symptoms, developed faint coarsely punctate rashes, one after the second injection only and the other after the third and fourth injections. Of the remaining two, one was independently exposed to infection and developed scarlet fever four days after the second injection, while the other was thought to develop scarlet fever immediately after the second inoculation. This may be said to be doubtful, in view of positive "Dick" tests at intervals of 23 and 30 days after the last inoculation.

Results.

As two of the children received only two doses of scarlatinal toxin, they need not be taken into account. The others were re-"Dicked" at intervals varying from one to three weeks. Of 13 who received a full course of injections, 11 gave a completely negative response within three weeks, the "Dick" test being negative in the majority within a week after the last inoculation. One of these showed the transition, being faintly positive on the fifth day and completely negative on the 15th day. Of the remaining two cases, one remained strongly positive on the thirteenth day, and the other was positive on the ninth day. The latter showed a less marked reaction than on the occasion of the original test, and might have been negative later if another retest had been possible.

Conclusions.

On the assumption that a negative "Dick" test means insusceptibility to scarlet fever, the above investigation appears to suggest that the prophylactic use of scarlatinal toxin is justified. In the series of cases, a positive test has become negative in approximately 90 per cent. The question arises as to how long this immunity is likely to last. Owing to the difficulty of retaining children in hospital over a long period, it has not been possible to investigate this. Additional members of the nursing staff are in process of being inoculated at present, so that facilities for retesting over a prolonged period will be available in the near future.

se o.	Age	"Dick" Test	Skin Doses	Interval between Injections	Reaction	Interval before Re-test	"Dick" Test	Remarks
	2½	+ +	250	—	sl. L.			
			500	4 days	sl. L.	9 days	—	Creche
			1,250	4 ,,	sl. L.			
			2,500	5 ,,	sl. L.			
	2	+ +	250	—	sl.L.			
			500	4 days	sl. L.	9 days	—	Creche
			1,000	4 ,,	sl. L.			
			2,500	5 ,,	sl. L.			
	2y.2m.	+ +	250	—	Nil			
			500	4 days	sl. L.	9 days	+	Creche
			1,250	4 ,,	sl. L.			
			2,500	5 ,,	sl. L.			
	1y.7m.	+	250	—	sl. L.			
			500	4 days	sl. L.	9 days	—	Creche
			1,250	4 ,,	sl. L.			
			2,500	5 ,,	sl. L.			
	3½	+ +	250	—	L. +			
			500	4 days	L. +	7 days	—	Diphtheria
			1,250	4 ,,	L. +sl. C.			
			2,500	5 ,,	L. +			
	1y.7m.	+	250	—	sl. L. sl. C.			
			500	4 days	sl. L. sl. C.	7 days	—	Diphtheria
			1,250	4 ,,	sl. L.			
			2,500	5 ,,	sl. L.			
	3	+ +	250	—	L. C.			
			500	4 days	Marked	23 days	+	
					L. and C. Rash	30 ,,	+	Diphtheria
	6	+ +	250	—	L.	5 days	Faintly +	
			500	4 days	L. sl. C. Rash	—	—	Diphtheria
			1,250	4 ,,	L. sl. C.	15 days	—	
			2,500	4 ,,	L.			
	5	+ +	250	—	L.			
			500	4 days	L.	21 days	ps. —	Diphtheria
			1,250	4 ,,	L. Rash			
			2,500	4 ,,	L. sl. C. Rash			
	19	+ +	250	—	L.			
			500	5 days	L.	16 days	—	Nurse
			1,000	5 ,,	L. } Decreasing			
			2,500	6 ,,	L.			
			5,000	6 ,,	L.			
	4	+ +	250	—	L.			
			500	4 days	L.			
			500	4 ,,	L.	7 days	—	Diphtheria
			2,000	4 ,,	L.			
			3,500	5 ,,	L.			

[Continued on next page.

Case No.	Age	" Dick " Test	Skin Doses	Interval between Injections	Reaction	Interval before Re-test	" Dick " Test	Remarks
12	5	+ +	250	—	L. Rash			
			500	4 days	L.			
					Sc. F.	23 days	ps. —	Diphtheri
					4 days later			
13	2½	+ +	500	—	L.			
			1,000	5 days	L.	7 days	—	Diphtheri
			2,000	4 ,,	L.			
			3,500	4 ,,	L.			
14	5½	+ +	500	—	L. +			
			1,000	4 days	L.	7 days	—	Diphtheri
			2,000	4 ,,	L.			
			3,500	4 ,,	L.			
15	7	+ +	500	—	L.	6 days	+	
			1,000	4 days	L.			Diphtheri
			2,000	5 ,,	L.	13 days	+	
			3,500	4 ,,	L.			

+ = positive.
+ + = strongly positive.
L. = local
sl. L. = slight local.
C. = constitutional disturbance.
sl. C. = slight constitutional disturbance.
— = negative.
ps. — = pseudo negative.

CONTROL OF THE ACUTE INFECTIOUS FEVERS IN THE HOSPITAL NURSING STAFF.

The liability of members of the nursing staff to contract the acute infectious diseases dealt with in fever hospitals has always been a source of concern to those in administrative charge, principally on account of the serious loss from an economic point of view, but also on account of the possible effect on the individual's health. In recent years much research has been devoted to this problem, and as a result of the risks of fever nursing have been lessened considerably by the employment of certain immunological and preventative procedures. Most progress has been done with regard to diphtheria, but it is satisfactory to know that scarlet fever is rapidly being placed on the same footing. A survey of the incidence of various diseases amongst members of the nursing staff during the year 1925 shows that much remains to be done. Two nurses contracted enteric fever, seven nurses contracted diphtheria, and a similar number contracted scarlet fever, one with a fatal result, due to serious complications. Other infectious diseases are represented by one case of erysipelas. These figures are by no means negligible, but it is expected that the procedures now in practice will eliminate to a great extent any risk run by the staff in the performance of their duties.

Enteric Fever.

A certain degree of protection can be conferred in an individual by the injection of a protective vaccine. This is carried out systematically at Monsall Hospital, each probationer nurse receiving two protective vaccine injections at an interval of ten days during her first three months' service. Her services are made unavailable for a typhoid ward during this period. Re-inoculation is considered necessary after an interval of a year if the individual continues to be employed in a typhoid ward.

Diphtheria.

With regard to this disease, the "Schick" test has been devised whereby susceptibility to diphtheria can be detected. This takes the form of an injection into the skin of a minute dose of diphtheria toxin, the result being a harmless local reaction in susceptible persons. A control injection is employed in order to rule out the possibility of a reaction being due to certain non-specific substances present in the toxin. A reaction due to these substances is known as a pseudo reaction.

The "Schick" test is now employed in a routine manner on every member of the staff on entering the service. Occasionally, at the beginning of the period, an interval of a few weeks sometimes elapses before testing.

During the year 141 nurses were tested, with the following results :—

141	Positive	22	25 = 17·7%
	Pseudo positive	3	
	Negative	97	116 = 82·3%
	Pseudo negative	19	
	Total pseudo reactions		22 = 15·6%

It may be stated that five nurses developed diphtheria before the test could be carried out. These presumably would be positive reactors, so that the total number of susceptible persons might be placed at 30, or 20·5 per cent. of the total tested during the year. Of positive reactors, one subsequently developed the disease, while the remaining nurses who developed diphtheria gave a reaction which was interpreted as pseudo negative—probably wrongly.

So far the test has not been employed among the domestic staff, who do not come into so intimate contact with the disease. In the past the incidence among the domestic staff has been negligible.

The detection of susceptible individuals is undoubtedly of great use, but is regarded only as the preliminary to a further step—the protection of such individuals. This may be done by the injection of a toxin antitoxin mixture three times at weekly intervals. No reactions of any severity have been noted to follow these injections. In only one case has it been necessary to take the nurse off duty—for one day only. Routine inoculation of the susceptible persons is now carried out. Of 25 of these (see the above table), 18 have received a full course of three injections. Occasionally resignation or intercurrent disease, or some other cause, prevents the routine being completed, and hence two nurses received two injections only, two received only one, while three were untreated.

The results are instructive. No nurse who received the full course of injections developed diphtheria before the course could be completed.

It is occasionally noted that an attack of diphtheria does not confer an immunity to the disease. Thus the records show that one nurse was still "Schick" positive six months after an attack. It is also recognised that in a small percentage of cases immunity may not follow one series of protective injections. The records are not sufficiently complete to demonstrate this.

The figures given above appear to prove the efficiency of adopting these methods to suppress diphtheria among members of the staff of a fever hospital.

Scarlet Fever.

With regard to scarlet fever, an analogous test known as the "Dick" test has been utilised to ascertain susceptibility. A small dose of scarlet fever toxin is introduced into the skin with similar results as in the case of the "Schick" test. A control test is also employed, and this has the same significance. The test is adopted at the hospital for every member of the staff on joining the service, although at first, owing to the intermittent nature of the supply of toxin, delay of a few weeks occasionally took place.

During the year 157 nurses were tested, with these results:—

157	Positive	12	13 = 8·2%
	Pseudo positive	1	
	Negative	135	144 = 91·8%
	Pseudo negative	9	
	Total pseudo reactions		10 = 6·3%

Five nurses contracted scarlet fever within a week or two of joining the staff and before testing was carried out. This would give a percentage of 11·1 susceptible individuals among those under survey. In the earlier part of the period two nurses who gave a negative response contracted the disease, but there was some doubt of the potency of the toxin used in these cases. One nurse with a positive reaction developed scarlet fever.

During the last few months a limited amount of toxin for the production of immunity has been available. This procedure is more or less experimental at present, and necessitates the injection of four or five graduated doses of toxin at four-day intervals. One nurse has been inoculated up to the present, with a resultant negative "Dick" test within a fortnight. It is hoped that this form of preventative inoculation will be carried out more frequently in the future. Immunity, as judged by the "Dick" test, develops in a shorter time than in the case of diphtheria.

ABERGELE SANATORIUM.

REPORT FOR THE YEAR ENDING DECEMBER 31ST, 1925, WITH A QUINQUENNIAL REPORT FOR THE YEARS 1921–25.

BY DR. A. G. M. GRANT, MEDICAL SUPERINTENDENT.

During the year ending December 31st, 1925, 122 patients were admitted to the Sanatorium, including 1 readmission, and 121 were discharged, and there was 1 death from cerebral hæmorrhage. In addition, 5 children with non-pulmonary tuberculosis were admitted to Pen-y-Coed Bungalow, and a similar number was discharged. Four of these had open lesions on admission, all of which were healed on discharge.

Table 1 shows a classification according to age and sex of the cases under treatment :—

Ages	Males			Females		
	Admitted	Discharged	Died	Admitted	Discharged	Died
0 to 4 ..	1	..	..	..	..	..
5 ,, 14 ..	2	3	..	2	2	..
15 ,, 24 ..	28	24	..	10	7	..
25 ,, 34 ..	26	30	..	10	10	..
35 ,, 44 ..	29	31	..	5	8	..
45 ,, 64 ..	14	11	1	..	..	..
65 ..	..	..	..	..	..	..
Total ..	100	99	1	27	27	..

Table 2 shows a classification of the immediate results of treatment in the discharged pulmonary cases.

(*a*) Patients in whose sputum tubercle bacilli were found :—

	No. of Cases	Disease Quiescent	Much Improved	Improved	Stationary or Worse	Died
Stage i. ..	10	3	3	4	..	..
,, ii. ..	12	..	5	5	2	..
,, iii. ..	26	1	3	8	13	1
Total ..	48	4	11	17	15	1

(*b*) Patients in whose sputum tubercle bacilli were not found :—

	No. of Cases	Disease Quiescent	Much Improved	Improved	Stationary or Worse	Died
Stage i. ..	28	11	11	5	1	..
,, ii. ..	33	2	17	12	2	..
,, iii. ..	13	2	4	1	6	..
Total ..	74	15	32	18	9	..

Table 3 shows the result of treatment in the discharged pulmonary cases in relation both to their working capacity and to any alteration in their lung condition from the anatomical standpoint (Turban-Gerhardt classification).

Patients in whose sputum tubercle bacilli were found.

(*a*) Patients discharged with working capacity fully restored :—

Males						Females					
Stage on Admission	Number Treated	Stage on Discharge				Stage on Admission	Number Treated	Stage on Discharge			
		0	1	2	3			0	1	2	3
1	2	2	..	..	..	1	..	..	..	..	..
2	..	..	..	..	..	2	..	..	..	..	..
3	1	..	1	..	..	3	..	..	..	..	..
Total ..	3	2	1	..	..	Total ..	..	..	..	..	..

(*b*) Patients discharged with working capacity incompletely restored :—

Males						Females					
Stage on Admission	Number Treated	Stage on Discharge				Stage on Admission	Number Treated	Stage on Discharge			
		0	1	2	3			0	1	2	3
1	5	1	4	..	..	1	3	..	3	..	..
2	9	..	2	7	..	2	1	..	..	1	..
3	9	..	1	2	6	3	1	..	..	1	..
Total ..	23	1	7	9	6	Total ..	5	..	3	2	..

(*c*) Patients discharged without restoration of working capacity :—

Males						Females					
Stage on Admission	Number Treated	Stage on Discharge				Stage on Admission	Number Treated	Stage on Discharge			
		0	1	2	3			0	1	2	3
1	..	..	..	..	..	1	..	..	..	..	..
2	2	..	..	2	..	2	..	..	..	..	..
3	11	..	..	..	11	3	3	..	..	..	3
Total ..	13	..	..	2	11	Total ..	3	..	..	..	3

Patients in whose sputum tubercle bacilli were not found.

(*a*) Patients discharged with working capacity fully restored :—

Males						Females					
Stage on Admission	Number Treated	Stage on Discharge				Stage on Admission	Number Treated	Stage on Discharge			
		0	1	2	3			0	1	2	3
1	7	6	1	..	..	1	..	..	..	..	..
2	2	..	..	2	..	2	..	..	..	..	..
3	1	..	1	..	..	3	..	..	..	..	..
Total ..	10	6	2	2	..	Total ..	..	..	..	..	..

(*b*) Patients discharged with working capacity incompletely restored :—

Males						Females					
Stage on Admission	Number Treated	Stage on Discharge				Stage on Admission	Number Treated	Stage on Discharge			
		0	1	2	3			0	1	2	3
1	11	2	9	..	..	1	8	..	8	..	..
2	25	..	9	16	..	2	4	..	2	2	..
3	4	..	..	2	2	3	2	..	1	1	..
Total ..	40	2	18	18	2	Total ..	14	..	11	3	..

(*c*) Patients discharged without restoration of working capacity :—

Males						Females					
Stage on Admission	Number Treated	Stage on Discharge				Stage on Admission	Number Treated	Stage on Discharge			
		0	1	2	3			0	1	2	3
1	..	..	..	..	..	1	2	..	2	..	..
2	..	..	..	..	..	2	..	..	..	..	..
3	7	..	..	..	7	3	1	..	..	..	1
Total ..	7	..	..	..	7	Total ..	3	..	2	..	1

Of the discharged patients 100 gained in weight, the average gain being 9 lbs. ; 16 lost in weight, with an average loss of 3 lbs. 12 oz. ; while 5 were not weighed. The greatest gains were recorded from September to November, while from April to July the gains were the lowest.

Towards the end of the year a Mercury Vapour Quartz Lamp of the atmospheric type was installed as an auxiliary in the treatment of surgical tuberculosis.

QUINQUENNIAL REPORT, 1921–1925.

In the last five years 29 children with non-pulmonary tuberculosis were discharged, after a period of treatment averaging approximately two years. Of these 19 had had the disease healed. Twenty had had open lesions on admission, showing that the disease was already advanced. Experience has taught that an open lesion is a serious development in tuberculosis, definitely diminishing the prospects of good recovery, and necessitating a greatly prolonged period of treatment.

The following table shows a classification of the discharged cases according to the parts affected, with the results of treatment :—

	Number	Open lesions on admission	Result of Treatment		
			Healed	Improved	Stationary
Spine	3	3	2	1	—
Hip	4	3	2	—	2
Knee	4	1	4	—	—
Other bones and joints	11	10	6	4	1
Peripheral glands..	4	2	3	1	—
Other organs.. ..	3	1	2	—	1
Total	29	20	19	6	4

A few had more than one part affected, but for the purpose of tabulating the chief lesion has been the one entered.

Of the pulmonary cases, 515 adults, considered to be tuberculous, were discharged.

The following tables classify them according to their condition on discharge, the Turban-Gerhardt classification being used :—

(*a*) Patients in whose sputum tubercle bacilli were found :—

	No. of Cases	Disease Quiescent	Much Improved	Improved	Stationary	Died
Stage i. ..	35	12	15	7	1	..
„ ii. ..	42	2	17	16	7	..
„ iii. ..	147	5	29	69	43	1
Total ..	224	19	61	92	51	1

(*b*) Patients in whose sputum tubercle bacilli were not found :—

	No. of Cases	Disease Quiescent	Much Improved	Improved	Stationary	Died
Stage i. ..	167	114	32	16	5	..
„ ii. ..	75	14	34	22	5	..
„ iii. ..	49	4	15	18	12	..
Total ..	291	132	81	56	22	..

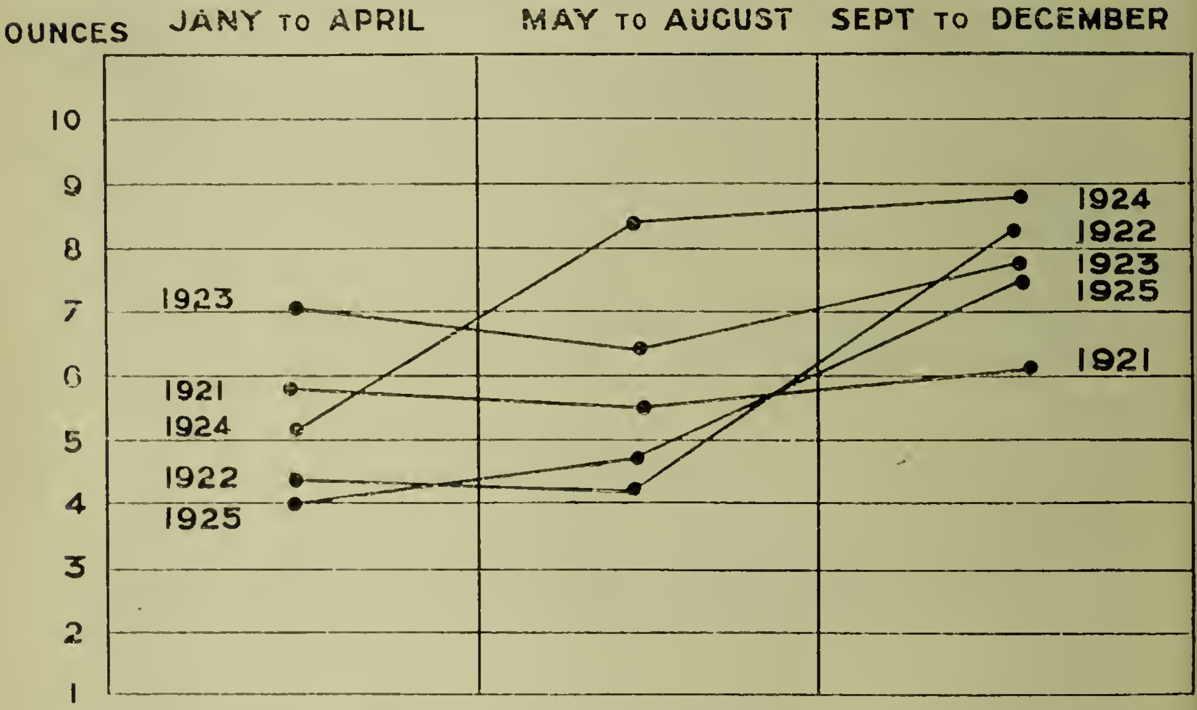
Investigations have been made into the weekly weight records of patients during the last five years. In each year maximum gains were registered in the autumn.

A more correct view can be obtained by recording the seasonal rather than the monthly gain, as special factors may have a temporary effect on weight which cause one month to vary from the corresponding month in other years, but this is frequently corrected later, so that the seasonal gain in different years remains fairly constant.

Instance may be given the of effect of extremes of temperature.

In cold, and again in hot weather, losses in weight are regularly noted, with a marked gain on the return of a more moderate temperature.

The accompanying chart shows a close resemblance between all years, pointing to a definite seasonal influence, the only variation being the rise in the May to August period of 1924, which is due to a marked increase in weight being registered in August instead of in September and October, as in the other years. The chart shows the average weekly gain per patient during the periods January to April, May to August, and September to December.



Treatment has been based on the principle of rest and graduated exercise. After a period of observation in bed, patients are allowed up for gradually lengthening periods, and if their condition warrants it they pass on to graduated walks, and later to work. To create an interest, patients are given work for which they are made responsible, and in many instances an enthusiasm and pride in the results were noticed.

Artificial pneumothorax was tried in 14 cases—*i.e.*, 2·7 per cent. of the total. In 6 no free pleural space was found, or the collapse was so small that the treatment had to be abandoned. In one case with good collapse the return of asthma, from which the patient had been free for some years, contra indicated a continuance of the treatment. In 2 cases partial collapse produced no definite benefit, while in the remaining 5 satisfactory pneumothorax was established with good results.

As to special investigation, work was done on blood pressure, on the changes in the polymorphonuclear leucocytes, and on the vital capacity in tuberculosis.

The results may be briefly summarised as follows :—

1. Blood pressure.—A lowered systolic pressure is common in pulmonary tuberculosis; most noticeable in advanced cases. A rise in pressure is an index of improvement, and continued readings may be a guide in the regulating of exercise. Variations in diastolic pressure were not so marked, although readings as low as 60 m.m. Hg. were recorded.

2. The polymorphonuclear count (Arneth Count) shows a definite change in active tuberculosis, the number of one and two-lobed nuclei being greatly increased, while the more mature leucocytes with three or more lobed nuclei are diminished. The diagnostic value of this blood count is lessened by the fact that other acute infections produce similar changes. A series of counts throughout the treatment may be a help in prognosis.

3. Vital capacity readings show a diminution as compared with those of normal individuals, varying according to the toxæmia or the extent of the disease.

Heliotherapy was extensively carried out during the last five years. Careful supervision is necessary until a well-developed protective pigment layer is formed. Even when this stage is reached exposure in heat so great as to produce sweating is deleterious.

In "surgical" tuberculosis sun treatment has a definitely tonic effect, both mentally and physically. On superficial lesions it has a direct healing action, and scars become free and elastic, while it is possible it may affect deeper structures through increased bactericidal properties of the blood.

It is at any rate well established that deep-seated surgical lesions react favourably in many cases to heliotherapy, and this is also the experience that we have had at Abergele.

It is difficult to dissociate from the sun treatment the effect of the open air and to apportion to each its value.

In pulmonary tuberculosis the degree of pigmentation has been found to be no reliable index of improvement or extent of disease. This refers to patients whose constitutional disturbances are not so severe as to confine them to bed. In "surgical" tuberculosis pigmentation may more frequently indicate good resistance, but here also the sign is not without its exceptions.

PNEUMONIA.

1925.

(1) PRIMARY PNEUMONIA.

Of the 2,591 known primary pneumonia cases 2,463 were fully investigated, and of these 1,255 cases were classified as lobar pneumonia, 1,122 cases as lobular pneumonia, and 86 cases simply as pneumonia.

The case fatality among lobar pneumonia cases was 30·9 per cent., 44·7 per cent. among lobular pneumonia cases, and 32·5 per cent. among the unclassified cases.

The Health Visitors paid 7,246 visits in connection with cases suffering from all forms of pneumonia.

(2) INFLUENZAL PNEUMONIA.

Of the 397 cases of influenzal pneumonia which came to our notice 382 cases were fully investigated, and of these 225 were males and 157 females.

The case fatality was 34·0 per cent.

INFLUENZA.

529 cases of influenza other than influenzal pneumonia came to the notice of this department through the official death returns, the activities of the Health Visitors, and a few by notification from medical practitioners. The greatest number of cases occurred during January and February, and 509 cases were investigated.

The case fatality was 22·5 per cent.

To get a clearer understanding of the effects of influenza the 397 cases of influenzal pneumonia may now be considered with the 529 cases of influenza. Of these, 382 cases of influenzal pneumonia and 509 cases of influenza were investigated.

	Males.	Females.	Total.
Cases	435	456	891
Deaths	127	118	245

It should be noted that as "influenza" is not a notifiable disease a large proportion of the cases have been brought to our notice by the death returns, with the result that there is in this series of investigated cases an undue proportion of fatal results.

The Health Visitors paid 932 visits in respect of influenza.

TABLE NO. 1.—SHOWING THE NUMBER OF PRIMARY, INFLUENZAL, AND SECONDARY PNEUMONIA CASES WHICH HAVE COME TO THE KNOWLEDGE OF THIS SECTION OF THE PUBLIC HEALTH DEPARTMENT DURING 1925.

THE TABLE ALSO SHOWS THE NUMBER OF NOTIFIED CASES, THE NUMBER OF CASES FULLY INVESTIGATED, AND THE TOTAL NUMBER OF KNOWN CASES.

		Notified Cases	Cases fully investigated		Cases not fully investigated		Total known Cases of Primary, Influenzal, and Secondary Pneumonia occurring in 1925	
(a) *Primary Pneumonia*—								
1. Number of primary pneumonia cases notified and fully investigated	2,107	2,200	2,107	2,463			2,591 (Primary)	3,183
2. Number of primary pneumonia cases notified and not fully investigated	93				93	128		
3. Number of primary pneumonia deaths not previously notified, but fully investigated ..	356		356					
4. Number of primary pneumonia deaths not previously notified, and not fully investigated	35				35			
(b) *Influenzal Pneumonia*—								
1. Number of influenzal pneumonia cases notified and fully investigated	339	351	339	382			397 (influenzal)	
2. Number of influenzal pneumonia cases notified and not fully investigated	12				12	15		
3. Number of influenzal pneumonia deaths not previously notified, but fully investigated ..	43		43					
4. Number of influenzal pneumonia deaths not previously notified and not fully investigated..	3				3			
(c) *Secondary Pneumonia*—								
1. Number of secondary pneumonia cases notified and fully investigated	185	187	185	193			195 (secondary)	
2. Number of secondary pneumonia cases notified and not fully investigated	2				2	2		
3. Number of secondary pneumonia deaths not previously notified, but fully investigated ..	8		8					
4. Number of secondary pneumonia deaths not previously notified, and not fully investigated	0				0			
	3,183	2,738		3,038		145	3,183	

SECONDARY PNEUMONIA.

195 cases of secondary pneumonia were notified during the year, and were associated with the following diseases:—

	Cases.
Measles	62
Whooping cough	130
Measles and whooping cough	1
German measles	2
Total	195

The case fatality was 48·1 per cent.

With 23 exceptions the cases occurred among children under five years of age.

The cases, being notified, were investigated, although they are *not* notifiable under the Pneumonia, Malaria, and Dysentery Regulations of 1918.

PNEUMONIA.

FIVE YEARS' SUMMARY.

1. Total known cases of primary, influenzal, and secondary pneumonia occurring in the five years 1921-1925:—

	1921	1922	1923	1924	1925
Primary Pneumonia ...	1,578 (Notification only)	2,539	2,534	2,629	2,591
Influenzal Pneumonia ...	218 (Notification only)	570	470	496	397
Secondary Pneumonia ...	Not separately recorded	Not separately recorded	139	298	195
Total known cases ...	1,796	3,109	3,143	3,423	3,183

During the five years there has been a marked improvement in the notification of pneumonia, especially in specifying the type of disease from which the patient is suffering.

2. The case fatality of the various forms of pneumonia based on the *investigated* cases during the five years is shown below:—

	1921	1922	1923	1924	1925
	%	%	%	%	%
Primary Pneumonia—					
Lobar	34·4	36·6	32·9	30·4	30·9
Lobular	42·6	47·9	50·1	36·6	44·7
Influenzal Pneumonia ...	36·9	39·0	35·8	42·7	34·0
Secondary Pneumonia ...	Not separately recorded	Not separately recorded	49·3	44·9	48·1

Remarks.

The case fatality of lobular pneumonia is higher than that of lobar pneumonia in each of the five years, and varies more from year to year than lobar. This is probably explained by the influence of epidemics of such diseases as whooping cough and measles, which attack young children, who are most susceptible to lobular or broncho-pneumonia.

3. The number of visits paid by the Health Visitors in connection with pneumonia cases 1921-25 is shown in the following table :—

1921	1922	1923	1924	1925
4,685	7,396	6,949	7,727	7,246

4. Below is given the relative incidence of the various forms of pneumonia among children of under school age, those attending school, indoor workers, and outdoor workers :—

		1921	1922	1923	1924	1925
Children under School age	Primary Pneumonia ...	591	1,216	1,123	1,267	939
	Influenzal ,, ...	13	88	77	64	52
	Secondary ,, ...	Not stated separately	Not stated spearately	130	251	165
School Children	Primary Pneumonia ...	293	297	353	350	403
	Influenzal ,, ...	20	42	39	37	41
	Secondary ,, ...	Not stated separately	Not stated separately	8	41	30
Indoor Workers	Primary Pneumonia ...	297	611	619	584	705
	Influenzal ,, ...	97	265	244	264	203
	Secondary ,, ...	Not stated separately	Not stated separately	—	—	*Nil*
Outdoor Workers	Primary Pneumonia ...	44	195	175	193	289
	Influenzal ,, ...	16	72	70	62	63
	Secondary ,, ...	Not stated separately	Not stated separately	—	—	*Nil*
Nil or not stated	Primary Pneumonia ...	401	111	140	111	127
	Influenzal ,, ...	114	82	40	34	23
	Secondary ,, ...	Not stated separately	Not stated separately	1	1	*Nil*

5. The proportion of males to females attacked by the various types of pneumonia is as follows :—

Years	Primary		Influenzal		Secondary	
	Males	Females	Males	Females	Males	Females
1921	625	460	163	97	Not stated separately	
1922	*1,423	1,007	315	234	Not stated separately	
1923	1,475	1,059	264	206	72	67
1924	1,548	1,081	257	239	134	298
1925	1,570	1,021	229	168	94	101
Totals ...	6,641	4,628	1,228	944	300	466

* Only "investigated" cases available for 1922.

6. The following tables show the number of cases who were—

(*a*) Removed to hospital for nursing purposes.

(*b*) Nursed at home with the help of the District Nurse.

(Unfortunately the records are not available for some of the early years.)

	Hospital Cases					Cases Nursed by the District Nurse				
	1921	1922	1923	1924	1925	1921	1922	1923	1924	1925
imary Pneumonia...	649	No record		628	704	No record			254	252
fluenzal Pneumonia.	36	No record		79	57	No record			59	46
condary Pneumonia	Not stated separately	No record		123	71	No record			19	8

INFLUENZA.

Summary, 1921-1925.

1. The total number of known cases of influenza, the number of cases investigated, and the case fatality based on the latter is given in the following table :—

	1921	1922	1923	1924	1925
Total known cases	172	348	478	356	529
No. of investigated cases ..	172	348	478	347	509
Case fatality per cent... ..	No record	26·1	27·6	36·5	22·5

2. The highest number of cases occurred in each year in the following months :—

1921	1922	1923	1924	1925
December (53 cases)	January (197 cases)	April (180 cases)	March (123 cases)	January (266 cases)

3. The number of visits paid by the Health Visitors in connection with cases of influenza were :—

1921	1922	1923	1924	1925
235	970	889	713	932

During this period the number of cases brought to our notice was insufficient to call for any special action, particularly since the majority of the cases only became known after death or recovery, as the disease, when uncomplicated by pneumonia, is not notifiable.

Cases of influenza complicated by pneumonia as previously stated were, when circumstances rendered it desirable, removed to hospital—the Manchester Royal Infirmary and the two Union Hospitals receiving them. Serious cases nursed at home were attended by the nurses of the Manchester and Salford District Nursing Association.

In times of epidemic, arrangements are made with the Board of Guardians whereby cases of influenza which require hospital treatment are removed to a special ward in their institution.

STATEMENT OF WORK DONE BY THE HEALTH VISITORS.

The staff at the end of the year 1925 consisted of a Superintendent, an Assistant Superintendent, 53 Health Visitors, a Cleansing Nurse, and 7 female Clerks, and 1 temporary female Clerk.

The main features of the Health Visitors' work, as in previous years, included the visitation of infants in their homes from the time the attendance of the midwife or doctor ceases until the completion of the child's fifth year; the investigation of cases of measles, whooping cough, pneumonia, and influenza; and the investigation and following up of cases of scabies and vermin.

Table 1 shows the work done throughout the year in each district worked by the Health Visitors.

In January, 1925, a change-over from the old sanitary districts to the new divisions of the municipal wards was made. This occasioned much work and much reorganisation, and so far as the Health Visitors' work was concerned 1925 was, as it were, a trial year. The size of the new sub-district allotted to each Health Visitor was apportioned very carefully, but it was not possible to estimate the number of new births (which is the governing factor in the size of a district) which would actually occur in each sub-district throughout the year, and this accounts for the inequality in the number of "new births," as shown in Table 1. This inequality is being remedied as speedily as possible.

Table 2 compares the work of 1925 with that of the four preceding years.

Notification of Births Act.

The decrease in the number of births has continued during the year, 14,127 births being registered in 1925, as compared with 14,691 for 1924.

The total number of notifications received in 1925 under the Notification of Births Act was 14,728, of which 4,713 were from doctors, 9,626 from midwives, and 389 from parents. Out of the total of 14,728, those occurring in the districts covered by the Health Visitors numbered 12,278. The registered births within the City numbered 14,127, and of these 12,535 were referred to the Health Visitors.

In addition to the above, in 1925 the Health Visitors "found" on their respective districts 142 children who were born during the current year, 156 who were born during 1924, 146 born during 1923, 87 born during 1922, and 47 born during 1921, thus adding a total of 578 new cases to be visited to those already distributed to them through the Notification of Births Act.

These cases were either removals into Manchester from other towns or removals from at (present) unvisited areas of the City. The notification of the removal of an infant from one local authority to another has now become a general practice.

Deaths.

1,249 deaths of infants under one year of age occurred in the districts covered by the Health Visitors during 1925. Of these, 130 lived less than a day, 154 died over a day old and within a week, 177 died over a week old and within a month, 201 died over a month and under three months old, 213 over three months and under six months old, 201 over six months and under nine months old, and the remaining 173 between the ages of nine months and one year.

In 293 cases death was due to bronchitis and pneumonia, in 247 cases to prematurity, in 136 cases to enteritis, in 118 cases to debility and marasmus, in 60 cases to convulsions, in 21 cases to accidental deaths, including those due to want of attention at birth; 19 cases died from tuberculosis, 5 from syphilis, 6 from influenza, 76 from whooping cough, 26 from measles, and the remaining 242 deaths were due to various other causes.

Table 3 shows the distribution of deaths, according to districts, of children under one year of age.

There were also 742 deaths of children of one to five years of age during 1925 in the "visited" areas of the City. Of these, 383 occurred in the second year of life, 171 in the third year, 110 in the fourth year, and 78 in the fifth year.

In 250 cases death was due to bronchitis and pneumonia, 38 children died from enteritis, 7 from debility and marasmus, 10 from convulsions, 31 from accidental causes, 61 from tuberculosis, 6 from influenza, 89 from measles, 100 from whooping cough, and 150 from various other causes.

Table 4 shows the distribution of deaths, according to districts, of children aged one to five years.

Summer Diarrhœa.

From July 15th to September 30th, 1925, 425 cases of summer diarrhœa were visited. Of these, 58 occurred during the last two weeks in July, 248 during the month of August, and 119 during the month of September. These figures are much higher than those for the preceding year, when only 168 cases were visited.

224 of the total cases were children under twelve months, and of these 53 were having breast feeding, 25 mixed feeding, and 146 entirely artificial feeding at the onset of the illness.

72 cases died, though not all of the deaths were ascribed to diarrhœa, 61 of the total deaths were those of children under one year of age, and of these 24 had not yet attained their fourth month.

49 cases were admitted to hospital.

The distribution of these cases is shown in Table 5.

Child Welfare Centres.

The close co-operation between the Health Visitors and the Infant Welfare Centres continues. The Health Visitors' case sheets of all infants not progressing satisfactorily are referred to the Medical Officers of the Centres, likewise the previous reports of the Health Visitors on all new cases attending the Centres. A list of new attendances at each of the Infant Welfare Centres is sent in each week from each Centre to the Public Health Office, and the date of the attendance and the name of the Centre is entered on the infants' case sheet for the Health Visitors' information.

The Manchester Babies' Hospital.

The number of Corporation beds in the Manchester Babies' Hospital remained, as formerly, at 18 until the middle of September, when 12 more beds were allocated to the use of Corporation cases; 2 of these were added to the existing 18 beds for children under one year of age, and the remaining 10 were set apart for children from one to three years of age suffering from rickets.

All the beds have been kept filled continuously, and there is usually a waiting list, both for the small beds and for the rickets beds.

During 1925, 107 applications were received for admission to the small beds in the hospital. Of these, 10 were cancelled for the following various reasons: 2 were admitted into private beds; 2 were admitted to other hospitals; 2 died before beds were available; 1 so much improved whilst on the waiting list that hospital treatment was no longer necessary; and in 3 instances the parents at the last minute were unwilling to allow their children to go into hospital. As before stated, these beds are reserved for children under one year of age. 97 cases were admitted to hospital.

1925 Of the 97 cases admitted to the Babies' Hospital (small beds)	CHILD WELFARE CENTRES
8 cases	Were sent in from the centre at 72, Rosamond Street West, C.-on-M.
5 ,,	Were sent in from the centre at 226, Hyde Road, Gorton.
15 ,,	Were sent in from the centre at 45, Higher Ardwick.
13 ,,	Were sent in from the centre at 93, Hamilton Street, Collyhurst.
14 ,,	Were sent in from the centre at 135, Pollard Street, Ancoats.
18 ,,	Were sent in from the centre at 1, Manipur Street, Openshaw.
2 ,,	Were sent in from the centre at 153, Cheetham Hill Road, Cheetham.
2 ,,	Were sent in from the centre at 686, Oldham Road, Newton.
4 ,,	Were sent in from the centre at 40, Lower Moss Lane, Hulme.
1 Case	Was sent in from the centre at Abbey Hey, Gorton.
3 Cases	Were sent in from the centre at Conran Street, Harpurhey.
3 ,,	Were sent in from the centre at Wilmslow Road, Rusholme.
2 ,,	Were sent in from the centre at Elm Street, Miles Platting.
7 ,,	Were sent in from the Public Health Office.
97	

The various conditions from which the children were notified to be suffering were :—

	Cases		Cases
Malnutrition	17	Effect of % for stenosis	1
Atrophy	1	Marasmus	27
Dyspepsia	27	Gastritis	1
Rickets	8	Spina bifida	1
Diarrhœa	5	Prolapse	1
Vomiting	2	Tuberculosis	3
Bronchitis	2	Cong. stenosis of pyloris	1
		Total	97

The ages of the infants on admission were :—

	Cases		Cases
Under 1 month	2	Aged 7 months	5
Aged 1 ,, ...	8	,, 8 ,, ...	6
,, 2 months	8	,, 9 ,, ...	4
,, 3 ,, ...	16	,, 10 ,, ...	7
,, 4 ,, ...	16	,, 11 ,, ...	5
,, 5 ,, ...	10	Over 11 ,, ...	8
,, 6 ,, ...	2		
	Total		97

The length of stay in hospital varied from one day to as much as 34 weeks. The average was about eight weeks.

20 of the cases died in hospital and 7 have died since discharge. About 88 per cent. of the mothers attended the Infant Welfare Centres regularly after receiving their infants home again from hospital. The Health Visitors visited the children promptly as soon as the notification of discharge was received, and a report of the conditions found was sent to the hospital. Attendance at a Centre was always strongly urged. From the latest reports on the hospital cases, 59 were said to be in a satisfactory condition and 8 were unsatisfactory. 2 cases have removed, and the Health Visitor was unable to trace them.

From September, 1925, to the end of the year 22 applications were received for admission to the "Rickets" beds, and 15 children were admitted.

For the various following reasons the other seven applications were cancelled :—1 case was admitted to a private bed in the hospital, 1 case was admitted to another hospital, 2 cases were over age, 1 case was not suitable for admission, and in 3 cases the parents eventually refused to part with the children and to allow them to go into hospital.

2 cases were sent in from the Infant Welfare Centre, 72, Rosamond Street, C.-on-M.
4 ,, ,, the Infant Welfare Centre, 1, Manipur Street, Openshaw.
2 ,, ,, the Infant Welfare Centre, 93, Hamilton Street, Collyhurst.
3 ,, ,, the Infant Welfare Centre, 45, Higher Ardwick.
1 case was sent in from the Infant Welfare Centre, 135, Pollard Street, Ancoats.
1 ,, ,, the Infant Welfare Centre, 153, Cheetham Hill Road.
1 ,, ,, the Infant Welfare Centre, Conran Street, Harpurhey.
1 ,, ,, the Public Health Office.

15

The length of stay in hospital varied from 3 weeks to 24 weeks, the average stay being 12 weeks.

Of the 15 cases admitted, 1 died in hospital, and the latest reports with regard to the remaining 14 cases which were discharged, state that 10 are now in a satisfactory condition, 2 are not yet very satisfactory; 2 cases have removed, and the Health Visitors have been unable to follow them up. Forty-six per cent. of the cases have attended the centre since discharge from hospital.

Creche Ward, Monsall.

This ward, which consists of 8 beds, is kept for the reception of children between the ages of one and two years suffering from malnutrition.

During 1925, 23 applications for admission to the Creche Ward were received, and 15 children were admitted. Of the remaining 8 cases, 3 were admitted to other hospitals, 3 were over the age for admission, and in 1 case the parents refused to allow the children to go into hospital at all; 1 died before admission.

1925 Of the 15 cases who were admitted	CHILD WELFARE CENTRES
1 case	Was sent in from the centre at 40, Lower Moss Lane, Hulme.
4 cases	Were sent in from the centre at 93, Hamilton Street, Collyhurst.
1 case	Was sent in from the centre at 1, Manipur Street, Openshaw.
2 cases	Were sent in from the centre at 135, Pollard Street, Ancoats.
1 case	Was sent in from the centre at 72, Rosamond Street West, C.-on-M.
1 "	Was sent in from the centre at 686, Oldham Road, Newton.
2 cases	Were sent in from the centre at 45, Higher Ardwick.
3 "	Were sent in by Dr. Drummond from the Public Health Office.
15	

11	children were admitted	suffering	from	rickets.
3	"	"	"	malnutrition.
1	child was	"	"	diarrhœa and vomiting.
15				

The length of stay in hospital varied from 9 weeks to 36 weeks.

Of the 15 cases who were discharged, 14 are now reported to be in a satisfactory condition, 1 is still unsatisfactory but continues to improve, and 1 is still unsatisfactory. One case has left Manchester, so that we have been unable to follow it up.

Only 6 children attended the Infant Welfare Centre after their discharge.

MEASLES, GERMAN MEASLES, WHOOPING COUGH, PNEUMONIA, AND INFLUENZA.

Measles.

Cases notified by doctors	6,231
Cases found by Health Visitors or notified by others than doctors	1,710
Total number of known cases	7,941
Total number of cases investigated	7,417

An analysis of the 7,417 investigated cases is given below :—

	Nursed at Home 7,204		Removed to Hospitals 168		* Developed Measles whilst in Hospitals 45		Total Cases Investigated
	No Pneumonia Complications	Complicated by Pneumonia	No Pneumonia Complications	Complicated by Pneumonia	No Pneumonia Complications	Complicated by Pneumonia	
Number of cases ...	7,018	186	117	51	22	23	7,417
Recovered ...	7,010	115	110	31	16	6	7,288
Died	8	71	7	20	6	17	129
Case fatality .	·11%	38·1%	5·9%	39·2%	27·2%	73·9%	1·7%

* Patients in hospitals for other conditions developing Measles.

The Health Visitors paid 16,135 visits in connection with the above measles cases during 1925.

German Measles.

Total number of German Measles cases notified	2,107
,, ,, ,, ,, visited	1,926
,, ,, ,, ,, recovered	1,924
,, ,, ,, died	2
The number of visits paid by the Health Visitors in respect of German Measles was	4,108

Whooping Cough.

Whooping cough, a disease which is not generally notifiable by the medical profession, has since 1911 been included in a Local Act as one of three infectious diseases in which parents and guardians of school children must notify the head teacher of any child known or suspected to be suffering from this disease.

The information is passed on to the Medical Officer of Health by the Education Authorities.

Total number of cases notified	3,333
Total number of cases visited	3,184

An analysis of the 3,184 investigated cases is shown below :—

	Nursed at Home 3,065		Removed to Hospitals 106		* Developed Whooping Cough whilst in Hospitals 13		Total Cases Investigated
	No Pneumonia Complications	Complicated by Pneumonia	No Pneumonia Complications	Complicated by Pneumonia	No Pneumonia Complications	Complicated by Pneumonia	
Number of cases	2,881	184	42	64	6	7	3,184
Recovered ...	2,837	71	29	25	—	—	2,962
Died	44	113	13	39	6	7	222
Case fatality .	1·5%	61·4%	30·9%	60·9%	100%	100%	6·9%

* Patients in hospital for other conditions developing Whooping Cough.

The Health Visitors paid 8,875 visits in connection with the above whooping cough cases during 1925.

The distribution of measles, German measles, and whooping cough throughout the City during 1925, and the mortality therefrom, together with a report showing how the various age groups have been affected by measles, are to be found elsewhere. (See pages 45–48.)

A summary of the work done in this section during the five years 1921-25 will be found on pages 163 and 164.

Pneumonia.

A full report of the work done during 1925 with regard to pneumonia appears elsewhere. (See pages 144–148.)

In 1925, 2,738 notifications of pneumonia were received ; 2,200 referred to cases of primary pneumonia ; 351 to cases of influenzal pneumonia ; and 187 to cases of secondary pneumonia. Secondary pneumonia does not come under the Pneumonia, Malaria, and Dysentery Regulations of 1918, but, being notified, a record was kept of the cases and they were investigated.

In addition to the notified cases 445 deaths from pneumonia, not previously notified, were brought to our notice from the death returns.

Of the 2,591 total known cases of pneumonia, 2,463 were fully investigated, and the Health Visitors paid 7,246 visits in connection with these investigations.

Influenza.

In 1925, 529 cases of influenza, other than influenzal pneumonia, were brought to the notice of the Department, and 509 were fully investigated by the Health Visitors, who paid 932 visits in connection with these cases.

A summary of the work done with regard to pneumonia and influenza during the five years 1921–1925 will be found on pages 145–148.

Relief.

The grant (which originated in 1917) to supply milk to young children suffering from measles, whooping cough, pneumonia, etc., in families where the actual income was below the standard scale, was continued during the year 1925., but the sum was reduced from the original £200 to £120.

Throughout the year 204 applications for milk were granted, and 3,047 pints of milk were given.

As in preceding years, we have endeavoured to use these grants of milk as a means towards the better nursing of young patients at home, and have insisted upon the necessary instructions given by the Health Visitors being carried out, as far as means would permit, wherever relief has been given.

Verminous Work.

During 1925, the number of notifications in respect of verminous cases received from the Education Authorities was 964. This number shows a considerable increase as compared with 1924, when 582 notifications were received.

With regard to cases of scabies, 215 notifications of families thus affected were received from the Education Authorities, as compared with 215 in 1924.

The Cleansing Station was in use on 21 half days for the compulsory cleansing of school children throughout the year, and 47 children were cleansed. Of these, 8 had body vermin only, 33 had head vermin only, and 23 had body and head vermin. Seventeen other voluntary cleansings were also carried out at the Cleansing Station, the cases being too seriously infested to be dealt with satisfactorily in their own homes.

In addition to her work at the Cleansing Station and the clerical duties appertaining to this appointment, the Cleansing Nurse paid 692 visits to verminous cases, and carried out cleansings of 57 children in their homes at the request of the parents, during 1925.

Although these "home cleansings" take much time, the results are sufficiently satisfactory to justify their continuance.

Where necessary the clothing and bedding have been stoved after these cleansings have been carried out.

Three cases of neglect were referred to the National Society for the Prevention of Cruelty to Children during the year, and visits from the Society's Officers have been helpful even without resorting to prosecution.

A summary of the work done by the Health Visitor appointed by the "Ladies Society for Visiting the Jewish Poor," and whose work is subjected to the supervision of the Medical Officer of Health, is given in the following tables :—

Work of the Jewish Health Visitor during the Year 1925.

DISTRICT	HOUSE-TO-HOUSE INSPECTIONS								RE-INSPECTIONS			Primary Infants	Subsequent	Children from 1 to 5 years	Total Number of Visits	LIMEWASHING (Yards, Sculleries, etc.)
	Number of Visits	Overcrowdings	Disrepair	Dirty	Cellars Dirty or Dilapidated	Yards Defective	W.C.'s Defective	Referred to Sanitary Dept.	Number of Visits	Defects Remedied	New Complaints Referred					
Red Bank and Strangeways	560	..	189	..	..	..	..	204	192	154	203	241	1961	2115	5069	..

Table I.—HEALTH VISITORS' YEARLY SUMMARY–TOTALS FOR THE 52 WEEKS ENDING JANUARY 2nd, 1926.

DISTRICTS	No. of Births	INFANT WORK							Other Sanitary Defects found and referred to Sanitary Department			LIME-WASHING										Number of Lime-Wash Tickets		SCABIES		VERMINOUS CHILDREN		MEASLES WORK				WHOOPING COUGH		PNEUMONIA		INFLUENZA		MISCELLANEOUS VISITS							TOTAL VISITS	REMARKS
																												Measles		German Measles																
		Primary Visits	Subsequent Visits 1st year	Children in their 2nd year	Children in their 3rd year	Children in their 4th year	Children in their 5th year	Infantile Diarrhœa Investigations (Deaths)	Found	Remedied	Visits	Visits	Bedrooms	Kitchens	Yards	Closets	Cellars	Coal Places	Ceilings	Staircases	Others	Given	Collected	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits.	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Sick Children	Visits "Out"	Visits *re* Relief	Inquests Investigated	Visits *re* Children Suffering from Diarrhœa *	Visits to Expectant Mothers *	Special Report		
All Saints—North	324	314	1,111	810	742	671	807	5	10	5	21	2	11	6	12	7	—	1	10	—	—	29	20	—	—	5	34	75	149	8	21	21	36	34	48	10	6	—	—	4	1	*42*	*21*	—	4,935	
,, South	222	230	1,264	1,040	993	639	158	2	13	11	8	64	16	5	16	4	3	2	11	1	—	29	30	4	3	5	7	63	113	7	6	38	67	15	22	17	4	—	4	3	—	*6*	*46*	—	4,776	
Ardwick—North	292	275	1,031	722	693	709	711	2	8	17	6	7	38	7	22	15	—	5	8	7	—	32	35	4	2	16	16	75	90	38	51	61	97	24	24	—	3	—	—	4	—	*8*	—	—	4,661	
,, South	327	318	852	520	538	465	656	4	32	7	12	38	56	47	56	43	1	2	11	5	—	66	43	3	2	4	22	119	140	14	33	31	63	26	60	4	3	—	2	—	7	*6*	*22*	—	3,936	
Beswick—North	213	209	886	656	654	518	517	—	87	110	37	14	53	24	53	38	—	—	53	—	—	101	109	1	—	32	101	88	114	2	5	34	57	15	19	—	4	1	—	1	1	*9*	*10*	—	3,966	
,, South	186	212	1,356	933	642	710	758	—	112	121	99	199	67	35	60	65	11	4	47	22	—	105	101	4	3	17	76	119	183	1	4	69	145	30	60	5	3	—	—	5	—	*51*	—	—	5,633	
Blackley	328	378	1,062	553	625	623	730	1	—	—	—	—	1	1	—	—	—	—	—	—	—	—	2	—	—	—	5	69	143	32	52	109	185	39	44	5	3	—	8	—	—	—	—	—	4,666	
Bradford—East	215	250	1,146	836	777	762	586	3	36	10	10	—	9	5	2	—	—	—	2	1	—	17	11	1	1	10	33	90	96	17	4	79	121	44	50	5	5	—	—	1	2	*23*	*12*	—	4,929	
,, West	240	247	879	743	671	667	701	3	58	45	11	2	65	23	24	6	1	1	20	3	—	49	56	—	—	33	70	66	51	1	3	35	40	24	24	13	4	—	—	1	2	*5*	*13*	—	4,291	
Collyhurst—East	217	230	1,276	874	869	796	855	3	56	43	—	—	27	24	34	13	—	2	34	—	1	10	53	—	—	21	30	20	33	2	2	66	111	39	51	9	—	—	—	1	—	*27*	*21*	—	5,297	
,, West	224	225	927	730	668	568	522	2	16	8	8	74	39	30	38	39	8	1	19	11	—	49	48	2	4	11	35	46	59	13	7	26	90	32	58	—	—	—	—	—	1	*31*	*25*	—	4,117	
,, Central	193	195	812	685	671	765	898	2	6	17	—	60	70	37	28	29	3	—	2	37	2	89	44	2	1	20	28	7	30	1	2	18	42	14	34	—	2	—	—	2	—	—	*1*	—	4,291	
Gorton North—East	134	160	994	745	510	418	463	2	24	10	1	2	7	4	1	—	—	3	2	1	—	6	8	—	—	2	7	46	43	12	4	46	191	27	43	1	1	—	—	2	—	*7*	*18*	—	3,720	
,, West	270	294	842	539	524	513	722	13	26	9	1	6	13	4	1	3	—	1	5	—	—	46	29	2	2	9	40	95	180	28	24	57	147	17	39	12	8	—	2	2	—	*56*	*9*	—	4,118	
Gorton South—East	307	298	910	662	650	497	616	4	25	6	18	4	5	4	6	7	—	1	—	1	—	18	12	1	—	5	27	131	140	1	—	37	116	27	80	21	7	—	—	—	—	—	—	—	4,252	
,, West	207	242	752	744	657	513	354	5	32	3	4	13	10	5	3	3	1	—	9	2	—	14	16	—	—	15	21	107	128	110	80	49	94	18	36	11	6	—	7	—	1	—	*13*	—	3,967	
Harpurhey—East	248	292	1,391	596	622	585	591	2	28	17	25	15	6	7	8	7	—	—	—	—	—	13	13	—	—	1	3	30	55	2	7	27	97	25	49	3	—	—	—	—	1	*4*	—	—	4,419	
,, West	171	210	1,053	921	908	939	901	1	13	2	—	—	12	12	9	8	2	2	29	3	—	20	15	—	2	9	20	12	38	6	5	38	86	17	32	4	6	1	—	—	2	*4*	—	—	5,211	
Levenshulme	257	279	670	524	463	411	187	—	4	3	8	3	—	—	—	—	—	—	—	—	—	2	—	1	1	—	2	32	26	191	293	118	130	24	22	7	7	1	—	2	1	—	*2*	—	3,403	
Longsight	324	300	964	779	574	443	324	4	3	4	2	4	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	101	142	76	122	35	135	50	60	4	1	1	2	—	—	—	*13*	—	4,132	
Medlock Street—East	302	315	1,288	943	826	773	704	8	14	—	5	13	11	15	17	16	2	1	8	2	—	9	22	9	7	10	44	133	337	16	26	33	60	52	120	8	8	—	1	13	1	—	—	—	5,753	
,, ,, South	182	212	902	590	658	431	634	1	19	16	3	1	2	11	25	18	11	8	5	—	1	23	29	5	7	12	12	175	303	9	11	11	29	20	36	9	5	—	—	5	—	—	*37*	—	4,081	
,, ,, S.E.	233	216	1,273	932	992	714	714	2	26	3	—	—	11	7	15	10	9	5	10	—	—	19	21	5	7	12	29	136	297	6	10	46	81	28	50	10	8	—	—	6	—	*5*	*1*	—	5,574	
Miles Platting—North	132	188	767	1,025	1,150	1,031	796	3	93	114	102	47	33	24	23	28	1	7	34	12	—	35	29	—	—	6	31	14	26	2	1	17	46	7	22	3	—	—	—	3	—	*16*	*31*	—	5,287	
,, East	168	182	1,049	637	704	714	629	3	186	61	246	264	122	90	79	86	—	1	33	21	—	136	145	1	1	6	41	24	31	2	3	57	100	22	20	—	—	—	3	—	—	*3*	*5*	—	4,739	
,, West	304	308	1,383	1,098	1,148	1,143	1,142	8	21	13	46	359	233	126	121	119	22	88	80	94	—	144	127	2	3	28	51	25	46	3	4	24	52	17	55	—	—	1	—	—	1	*58*	*12*	—	6,947	
Moston	247	354	761	658	601	577	719	2	8	8	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	70	121	47	75	27	72	23	36	17	6	1	10	8	—	*4*	—	—	4,196	
Moss Side—East	302	331	1,015	592	449	398	472	1	19	6	14	3	2	—	2	—	1	—	—	—	—	3	2	3	—	1	4	159	310	20	34	42	43	26	38	24	6	1	20	3	—	*11*	—	—	4,009	
,, West	292	363	1,096	596	633	545	526	1	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	195	285	49	80	25	26	20	22	11	7	—	7	1	1	*1*	—	9	4,499	
New Cross—Central	290	315	991	853	827	842	813	1	89	14	—	30	37	44	45	24	—	2	8	1	1	47	57	1	3	24	131	74	114	4	6	44	76	81	174	16	19	1	—	—	—	*7*	*22*	—	5,440	
,, South	425	287	1,038	682	587	576	653	5	33	13	19	210	209	167	183	172	10	21	36	8	—	88	106	6	3	44	92	76	131	3	8	63	133	53	87	10	5	2	—	—	—	*1*	*8*	—	4,773	
,, West	170	200	1,221	893	827	814	688	11	—	—	—	113	85	21	60	49	1	—	27	5	—	15	93	2	2	15	57	26	50	10	20	13	33	56	133	2	6	—	1	—	—	*2*	—	—	5,193	
Newton—North	197	198	1,207	755	704	655	593	1	—	—	16	1	9	2	10	11	1	8	4	1	—	15	16	—	—	22	52	87	92	30	38	58	81	39	108	—	1	5	2	6	1	*2*	—	—	4,752	
,, South	191	232	1,075	807	753	613	567	3	—	—	—	3	3	2	2	1	—	—	2	2	—	6	4	1	—	15	33	33	33	41	36	51	73	25	18	2	2	—	—	—	—	—	—	—	4,416	
Openshaw	330	349	1,346	661	548	475	463	5	7	10	13	21	26	11	7	4	—	1	21	—	—	13	16	1	5	12	35	90	133	7	13	98	286	44	59	5	3	—	—	—	—	—	—	—	4,672	
Rusholme	376	328	1,204	654	622	553	472	4	45	36	32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	132	195	76	136	84	164	44	77	86	33	4	3	5	—	*2*	*11*	—	4,913	
St. Clement's	193	198	990	849	797	646	615	2	49	35	19	15	31	38	59	49	16	11	21	8	2	60	89	1	1	9	55	87	107	6	7	56	176	60	81	5	1	—	2	3	—	*8*	*10*	—	4,788	
St. George's—East	334	325	1,146	737	658	594	715	7	25	57	79	41	9	12	13	6	—	—	9	—	—	22	19	3	2	14	29	166	182	20	17	36	60	56	74	12	11	—	3	2	—	*8*	*56*	—	4,989	
,, West	286	331	1,036	663	549	516	742	6	39	32	63	—	3	5	11	7	3	—	6	—	—	21	19	3	3	15	47	149	240	26	18	53	110	42	43	20	16	—	—	1	—	*59*	*7*	—	4,692	
St. John's	200	217	1,222	800	691	1,147	200	6	78	33	20	19	15	9	20	7	4	—	3	2	—	28	30	5	6	9	32	70	124	13	23	35	58	37	76	26	22	—	6	5	—	*20*	*1*	—	4,869	
St. Luke's—North	252	262	961	722	729	670	766	7	—	—	—	1	2	—	—	—	—	—	—	—	—	4	7	2	3	3	22	96	172	6	4	46	91	40	71	15	14	—	—	—	—	*12*	*9*	—	4,703	
,, South	288	310	790	728	630	609	704	8	33	14	2	—	—	—	1	1	—	1	2	1	—	3	3	4	—	1	2	172	297	10	17	27	77	40	54	3	—	2	6	—	1	—	*1*	—	4,491	
St. Mark's—North	386	372	1,097	697	679	685	706	8	48	8	30	—	18	29	29	21	4	—	4	6	—	56	45	4	2	15	30	129	197	27	27	36	42	33	53	5	9	—	—	7	—	*1*	—	—	4,890	
,, South	207	232	1,258	671	585	575	561	2	28	11	37	77	97	78	67	34	3	1	130	27	1	47	61	1	—	2	15	57	85	8	25	28	83	19	30	24	11	—	—	8	—	*32*	*16*	—	4,394	
St. Michael's—East	297	303	951	908	766	795	1,021	4	22	34	—	—	51	70	154	130	5	6	28	2	—	120	158	2	1	7	43	43	108	6	27	86	220	57	163	5	5	—	—	—	—	*6*	*18*	—	5,530	
,, West	261	248	906	665	651	653	740	10	13	22	5	—	10	2	13	11	2	—	7	—	—	14	14	1	1	13	29	45	68	7	12	96	145	54	131	6	5	3	—	1	—	*2*	—	1	4,196	
Withington	299	342	1,323	507	339	231	181	5	27	5	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	1	1	—	—	68	68	18	2	—	—	4	—	*4*	—	—	3,096	
District I.	218	244	1,195	1,188	1,068	1,030	918	3	80	141	100	—	50	19	20	14	—	3	33	13	1	44	57	3	2	20	48	66	120	7	5	30	72	25	36	10	8	—	—	2	1	*5*	*14*	—	6,201	
,, II.	274	305	1,103	900	843	719	600	5	15	35	11	5	41	21	19	9	—	4	24	5	—	38	39	5	1	26	21	97	98	20	8	49	59	31	37	23	5	1	—	2	—	*1*	*31*	—	5,004	
Measles I.	—	2	181	226	258	256	259	4	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	610	753	122	199	206	253	203	203	12	3	57	450	3	—	—	—	—	4,265	
,, II.	—	—	324	403	356	970	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	987	652	218	139	130	86	385	369	25	9	1	519	35	1	—	—	—	5,610	
,, III.	—	—	425	479	521	464	323	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	737	462	225	220	377	426	359	415	32	13	2	636	2	—	—	—	—	6,118	
,, IV.	—	—	500	356	428	425	471	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	795	630	196	207	211	267	396	372	26	14	—	430	—	—	—	—	—	5,725	
Temporary Health Visitors	—	15	24	20	26	19	16	—	4	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	159	97	15	106	7	38	29	28	—	1	—	14	—	—	—	*1*	—	615	
TOTALS	‡12,535	13,260	53,226	38,516	36,054	34,100	32,180	196	1,615	1,170	1,147	1,732	1,615	1,083	1,368	1,114	125	193	797	304	9	1,706	1,853	95	82	557	1,570	7,306	8,849	1,820	2,288	3,196	5,679	3,032	4,214	601	331	85	2,138	153	26	*519*	*553*	10	252,443	

* Miscellaneous visits :—Figures in italics represent records of advice given to expectant mothers and visits to children suffering from Infantile Diarrhœa discovered while visiting homes for other purposes and are already included in this table under the heading " subsequent visits " in connection with infant work.

‡ The excess of primary visits over the number of births is to be accounted for (*a*) by the number of " found cases " seen for the first time by the Health Visitor during the year ; and (*b*) by the removal of infants from the address where the birth took place usually to some other district prior to the Health Visitor's visit, in which case two Health Visitors have claimed a primary visit each for only one birth.

TABLE 3.

Ward	Number of Health Visitors working in the District	Number of Deaths of Children under one year of age	Causes of Death—1925. Children under 12 Months.											
			Bronchitis and Pneumonia	Prematurity	Debility and Marasmus	Enteritis	Convulsions	Tuberculosis	Syphilis	Accidental Deaths, including Want of Attention at Birth	Influenza	Measles	Whooping Cough	Other Causes
All Saints	2	53	14	12	2	8	3	—	—	3	—	—	1	10
Ardwick	2	66	19	8	5	5	5	1	—	—	—	—	7	16
Beswick	2	50	16	9	5	3	2	—	—	—	—	—	4	11
Blackley	1	26	6	5	1	1	4	1	—	2	—	—	1	5
Bradford	2	31	4	4	6	4	1	1	—	1	—	—	3	7
Collyhurst	3	69	20	7	7	8	1	—	1	1	—	1	6	17
Gorton North	2	39	8	9	3	4	3	—	—	—	—	—	3	9
Gorton South	2	30	5	10	3	4	1	—	—	—	—	—	3	4
Harpurhey	2	44	9	5	6	7	—	1	—	—	—	1	4	11
Levenshulme	1	14	2	6	—	3	—	—	—	1	—	—	—	2
Longsight	1	27	4	11	—	1	2	—	—	—	—	2	3	4
Medlock Street	3	85	27	11	8	12	5	1	—	1	—	6	4	10
Miles Platting	3	61	12	8	13	7	2	1	—	1	—	3	3	11
Moston	1	22	2	2	2	2	4	—	—	—	—	2	2	6
Moss Side East	1	30	4	6	3	3	3	—	—	2	—	—	2	7
Moss Side West	1	19	4	3	2	—	1	—	—	—	1	—	—	8
New Cross	3	105	29	20	12	12	2	3	1	1	—	2	5	18
Newton Heath	2	23	3	2	3	2	1	—	—	1	—	—	3	8
Openshaw	1	44	12	16	3	2	2	—	—	—	—	1	—	8
Rusholme	1	17	1	6	1	2	—	1	—	1	—	—	1	4
St. Clement's	1	30	7	7	4	2	3	1	—	—	—	—	4	2
St. George's	2	79	25	16	7	15	3	2	—	1	—	1	1	8
St. John's	1	17	5	4	—	3	—	—	—	—	—	—	2	3
St. Luke's	2	65	15	15	5	6	1	2	1	1	1	3	5	10
St. Mark's	2	59	13	8	6	6	2	2	2	1	3	2	2	12
St. Michael's	2	68	13	13	6	12	3	1	—	2	1	—	4	13
Withington	1	22	3	9	—	1	4	—	—	—	—	—	1	4
Special Districts	2	54	11	15	5	1	2	1	—	1	—	2	2	14
Total	49	1249	293	247	118	136	60	19	5	21	6	26	76	242

WARD	Number of Health Visitors working in the District	Number of Deaths among Children 1 to 5 years of age	CAUSES OF DEATH—1925. CHILDREN ONE TO FIVE YEARS.										
			Bronchitis and Pneumonia	Debility and Marasmus	Enteritis	Convulsions	Tuberculosis	Syphilis	Accidental Deaths	Influenza	Measles	Whooping Cough	Other Causes
All Saints	2	39	9	—	5	2	1	—	2	—	7	4	9
Ardwick	2	43	17	—	1	1	1	—	1	—	5	7	10
Beswick	2	30	11	—	1	—	—	—	1	—	5	6	6
Blackley	1	16	3	—	—	—	1	—	—	—	1	4	7
Bradford	2	26	11	—	—	—	1	—	3	1	2	5	3
Collyhurst	3	69	24	—	6	2	9	—	3	1	3	10	11
Gorton North	2	23	8	1	1	—	1	—	—	—	8	1	3
Gorton South	2	18	4	—	1	—	2	—	—	—	5	3	3
Harpurhey	2	23	10	1	—	—	1	—	1	—	—	2	8
Levenshulme	1	6	2	—	—	—	1	—	—	—	1	1	1
Longsight	1	11	2	—	—	—	2	—	2	1	1	2	1
Medlock Street	3	49	20	1	5	—	2	—	2	—	7	4	8
Miles Platting	3	33	13	—	2	—	4	—	2	—	1	9	2
Moston	1	8	2	—	—	1	1	—	—	—	—	1	3
Moss Side East	1	12	4	—	—	—	1	—	1	—	2	2	2
Moss Side West	1	9	2	—	—	—	—	—	2	—	2	2	1
New Cross	3	75	25	2	3	—	9	—	4	1	6	7	18
Newton Heath	2	18	1	—	1	1	5	—	1	—	1	3	5
Openshaw	1	14	4	—	1	—	1	—	—	1	3	4	—
Rusholme	1	7	—	—	—	—	1	—	—	—	1	—	5
St. Clement's	1	19	9	—	—	1	—	—	1	1	2	—	5
St. George's	2	35	14	—	—	1	5	—	1	—	5	4	5
St. John's	1	16	6	—	3	—	1	—	1	—	1	1	3
St. Luke's	2	28	10	2	—	—	1	—	—	—	3	1	11
St. Mark's	2	23	7	—	—	—	—	—	—	—	9	2	5
St. Michael's	2	52	19	—	5	—	6	—	1	—	1	9	11
Withington..	1	9	2	—	1	—	1	—	—	—	1	3	1
Special Districts	2	31	11	—	2	1	3	—	2	—	6	3	3
Total	49	742	250	7	38	10	61	—	31	6	89	100	150

TABLE 5.

SUMMER DIARRHŒA. CASES VISITED BY THE HEALTH VISITORS, 1925 (CHILDREN UNDER 5 YEARS).

Year	Total Number of Cases Visited	Number of Cases Occurring in			Districts																									Number Affected under one year of age	Method of Feeding at Onset of Illness			Deaths		
		July (15th-31st)	August	September	All Saints	Ardwick	Beswick	Blackley	Bradford	Collyhurst	Gorton North	Gorton South	Harpurhey	Levenshulme	Longsight	Medlock Street	Miles Platting	Moston	Moss Side East	Moss Side West	New Cross	Newton Heath	Openshaw	Rusholme	St. Clement's	St. George's	St. John's	St. Luke's	St. Mark's	St. Michael's	Withington	Districts I. and II.		Breast	Mixed	Hand	Total Number	Number under one year of age	Number under four months of age
1925	425	58	248	119	18	13	29	..	26	16	41	13	4	..	4	20	26	1	6	2	52	..	8	10	9	43	10	18	21	19	5	11	224	53	25	146	72	61	24

Table 2.

Showing the Work done by the Health Visitors during the Year 1925 and comparing it with the Work done in 1921, 1922, 1923, and 1924.

Classification of Visits	Number of Visits Paid in 1921	Number of Visits Paid in 1922	Number of Visits Paid in 1923	Number of Visits Paid in 1924	Number of Visits Paid in 1925
rimary visits to Infants	17,677	14,838	14,901	13,928	13,260
ubsequent visits to Infants	66,640	50,699	59,923	50,965	53,226
ubsequent visits to Children over 1 year of age and under 5 years	99,786	106,021	129,523	132,254	140,850
ther visits *re* Infants and Young Children	1,182	725	424	345	317
pecial visits *re* Sanitary Defects ..	1,547	1,629	2,161	1,551	1,147
isits *re* Limewashing	2,778	2,679	2,648	1,752	1,732
rimary visits to Verminous Cases (including Scabies)	631	471	550	470	652
ubsequent visits to Verminous Cases	2,085	1,621	2,066	1,663	1,652
easles Investigations	1,124	17,909	3,360	16,187	7,306
ubsequent visits	1,639	26,160	6,064	23,464	8,849
rman Measles Investigations ..	249	91	83	83	1,820
ubsequent visits	408	149	109	84	2,288
hooping Cough Investigations ..	4,114	2,111	3,629	1,712	3,196
ubsequent visits	8,165	3,574	5,685	2,652	5,679
isits *re* Relief	478	509	280	267	153
isits *re* Influenza	235	970	889	713	932
isits *re* Pneumonia	4,685	7,396	6,949	7,727	7,246
isits " Out "	21,595	17,270	5,716	3,886	2,138
pecial Investigations	3,739	248	....	....	.....
Total visits	238,757	255,070	244,960	259,703	252,443
umber of Health Visitors	52 (4 Health Visitors doing only Measles, Whooping Cough, and Pneumonia Cases)	52 (4 Health Visitors doing only Measles, Whooping Cough, and Pneumonia Cases)	52 (4 Health Visitors doing only Measles, Whooping Cough, and Pneumonia Cases)	52 (4 Health Visitors doing only Measles, Whooping Cough, and Pneumonia Cases)	53 (4 Health Visitors doing only Measles, Whooping Cough, and Pneumonia Cases)
umber of Districts worked	46	47 (3 temporary Measles Visitors also worked for four months)	48	48 (4 temporary Measles Visitors also worked for four months)	49 (4 temporary Measles Visitors also worked for four months)

HEALTH VISITORS SECTION.

SUMMARY OF THE FIVE YEARS' WORK 1921–1925.

Staff.

	1921	1922	1923	1924	1925
Superintendent	1	1	1	1	1
Assistant Superintendent	1	1	1	1	1
Health Visitors..	49	52	52	52	53
Clerical Staff	6	7	7	7	7 (1 temporary)
Cleansing Nurse	1	1	1	1	1

Number of Districts Worked.

1921	1922	1923	1924	1925
46	46	47	48	49

At the request of the Ministry of Health, the hitherto unworked districts of Clayton, Moston, Moss Side, and Rusholme, were opened in October, 1920, Kirkmanshulme was opened November, 1921, and Withington about September, 1922.

The table showing the work carried out by the Health Visitors during the five years 1921–1925 will be found on page 159.

Table showing the number of births which have occurred in the City during the years 1921–25.

	1921	1922	1923	1924	1925
No of births registered in the City...	17,601	15,855	15,388	14,691	14,127
No. of births notified under the notification of Births Act*	17,167	15,877	15,753	14,530	14,728
No. of births referred to the Health Visitors	15,298	13,495	13,539	12,757	12,535

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* These figures include stillbirths and also births in maternity homes and hospitals. Many of the latter are non-residents of Manchester.

In addition to the foregoing figures the following cases were added to the number of new births each year. They are generally termed "found" cases, as they have been brought to the knowledge of the Public Health Office by the Health Visitors, who have accidentally found these cases in the course of their work. A few of the cases were notified to us from other towns as removal cases.

	1921	1922	1923	1924	1925
"Found" Cases ..	728	804	814	826	578

Table showing the deaths occurring in the districts covered by the Health Visitors during the years 1921–25.

	1921	1922	1923	1924	1925
Children *under* 1 year	1,490	1,352	1,201	1,375	1,249
Children 1 to 5 years	639	888	717	1,009	742

The following table shows the age during the first year of life at which the mortality was highest :—

	1921	1922	1923	1924	1925
No. of children who lived less than one day	163	130	136	151	130
No. of children other than the above, who lived less than a week ...	164	157	150	158	154
No. of children who died between the ages of one week and one month	253	221	197	192	177
No. of children who died over the age of one month, but under three months	237	231	184	222	201
Deaths of children three to five months	294	214	167	218	213
Deaths of children six to eight months	201	191	178	228	201
Deaths of children nine up to twelve months old	178	208	189	206	173
Totals	1,490	1,352	1,201	1,375	1,249

Summer Diarrhœa.

Though not a notifiable disease, many cases of summer diarrhœa were brought to our notice each year by the Health Visitors and the Infant Welfare Centres, and a record has been kept of these cases which occurred between the middle of July and the end of October. Many of the cases have been very slight, and medical assistance was not always procured.

Table showing the known cases of summer diarrhœa during the years 1921–25 :—

	1921	1922	1923	1924	1925
Total known cases	730	71	228	168	425
Cases under 1 year of age ..	387	51	113	93	224
No. of cases who died	117	17	29	38	72
No. under 1 year who died ..	96	14	25	31	61
Cases admitted to hospital ..	68	1	19	29	49

The Manchester Babies' Hospital.

Eighteen beds were reserved in the Manchester Babies' Hospital for children under 1 year of age, suffering from malnutrition, etc. The number of beds remained at this figure until September, 1925, when 12 more beds were allocated to our use. Two of these were " small beds," thus bringing the number of beds for children under 1 year up to 20. The remaining 10 beds were reserved entirely for children of 1 to 2 years of age suffering from rickets.

	1921	1922	1923	1924	1925
No. of " small beds " ..	18	18	18	18	18 (January to September) 20 (September to December)
No. of cases admitted ..	87	83	85	89	97
No. of " Rickets " beds ..	—	—	—	—	10
No. of cases admitted ..	—	—	—	—	15

Crèche Ward, Monsall.

In addition to the above beds in the Manchester Babies' Hospital, 10 beds were set apart in Monsall Hospital (the ward being known as the Crèche Ward) for children between the ages of 1 and 2 years suffering from rickets, malnutrition, etc. In 1923 the number of beds was reduced to 8.

	1921	1922	1923	1924	1925
No. of beds ..	10	10	8	8	8
No. of cases admitted	5 Rickets, 11 Diarrhœa during August	20	27	19	15

In 1921 when so many cases of diarrhœa occurred, the Crèche Ward was cleared of the malnutrition cases, and was placed at our disposal for urgent cases of diarrhœa, and was not in use again for other cases until November of that year.

Measles, German Measles, and Whooping Cough.

The distribution of Measles, German Measles, and Whooping Cough throughout the City, and the mortality therefrom, etc., are given elsewhere.

The following tables show the number of cases which have occurred each year, and the number of visits paid with regard to each.

Four Health Visitors were devoted entirely to the visiting of these cases, but in times of epidemic the services of the other Health Visitors were required, and if the epidemic was a serious one as in 1922 and 1924 additional temporary Measles Visitors were appointed, after the approval of the Ministry of Health had been obtained to such a step.

Measles.

	1921	1922	1923	1924	1925
No. of cases	1,135	19,614	3,481	18,349	7,941
No. of cases investigated.. ..	1,093	19,430	3,345	17,171	7,417
No. of Visits paid	2,763	44,061	9,424	39,651	16,135
Cases fatality % of investigated cases	·45%	1·7%	2·1%	2·3%	1·7%

German Measles.

	1921	1922	1923	1924	1925
No. of cases	453	177	94	224	2,107
No. of cases investigated.. ..	429	170	85	196	1,926
No. of visits paid	657	240	192	167	4,108

Whooping Cough.

	1921	1922	1923	1924	1925
No. of cases	4,415	2,162	3,804	1,706	3,333
No. of cases investigated.. ..	4,321	2,139	3,725	1,681	3,184
No. of visits paid	12,279	5,685	9,314	4,634	8,875
Case fatality of the investigated cases %	3·7%	4·3%	5·4%	8·2%	6·9%

The report of the Health Visitors work in connection with pneumonia and influenza will be found under the sectional headings of "Pneumonia and Influenza" (see pages 144-148).

Relief.

Relief in the form of a grant of milk (usually one pint daily per person for 14 days) which originated in 1917, was distributed as follows throughout the years 1921-1925.

	1921	1922	1923	1924	1925
No. of applications allowed ..	377	764	350	512	204
No. of pints given	6,620	11,160	5,142	7,535	3,947

Verminous Work and Scabies.

Practically all the cases in connection with the above section are notified to us by the Education Authority.

The following tables show the number of cases which have thus been brought to the notice of the Department during the years 1921–1925, and visited :—

Verminous Cases.

	1921	1922	1923	1924	1925
No. of cases notified	514	580	700	582	964
No. of visits paid	2,507	1,991	2,423	1,902	2,127

Scabies Cases.

	1921	1922	1923	1924	1925
No. of cases notified	41	27	189	215	215
No. of visits paid	209	101	193	231	177

The following table shows the number of days on which the Cleansing Station at Oldham Road was in use, the number of school children who were "compulsorily" cleansed there, also the number of voluntary cleansings which were carried out by the Cleansing Nurse :—

	1921	1922	1923	1924	1925
No. of compulsory cleansings (school children)	33	51	41	13	47
No. of days the Station was in use...	8 days	12 days	9 days	4 days	10½ days
No. of voluntary cleansings	3 (Scabies cases)	6	6	6	17
No. of days the Station was in use...	1 day	1 day	1 day	1 day	4 days

Other work carried out by the Cleansing Nurse in addition to the above, and the clerical duties appertaining to this appointment :—

	1921	1922	1923	1924	1925
No. of visits paid to verminous cases	No record kept	630	714	653	692
No. of home cleansings ..	—	9	170	106	57

A summary of the work of the Health Visitors appointed by the Ladies' Society for Visiting the Jewish Poor, and carried out under the supervision of the Medical Officer of Health, is given below. In 1921 and 1922 two Visitors were employed, but in 1923, 1924, and 1925 only one Visitor was working.

	1921	1922	1923	1924	1925
No. of house to house inspections	1,357	1,023	606	579	560
No. of reinspections..	535	509	259	262	192
No. of primary visits to infants.	266	249	282	183	241
No. of subsequent visits.. ..	2,046	2,609	2,324	2,313	1,961
No. of visits to children 1 to 5 years	2,147	2,362	1,418	1,985	2,115
Total visits of all kinds ..	6,351	6,752	4,889	5,322	5,069

REPORT ON THE WORK OF THE MIDWIVES' DEPARTMENT FOR THE YEAR 1925

By Dr. M. A. C. Douglas Drummond.

Inspection of Midwives.

Under the direction of Dr. Douglas Drummond the inspection of midwives has been carried on by Miss A. Austin.

Year	No. of Midwives who notified intention to practice	No. practising in City but resident outside	No. of Midwives who				No. of Births attended by Midwives	No. of Births registered	% attended by Midwives
			Died	Removed from Area	Gave up work	Were removed from Roll			
1925	200	27	0	9	6	1	8,529	14,127	60

Inspection of Midwives—*continued*

	1924	1925
No. of visits paid	730	719
„ midwives interviewed	307	476
„ houses found dirty	5	4
„ bags found unsatisfactory	8	5
„ Registers found unsatisfactory	8	7

PUERPERAL INFECTION.

During the year 1925, against an average of 129 cases in the 20 years 1905-24, 179 cases of puerperal infection were notified, of which 50 occurred after abortion or premature labour. Of the abortions, 31 were at the second or third months of gestation, 4 at the fourth month, 4 at the fifth month, 5 at the sixth, and 6 at the seventh month of pregnancy.

The total fatal cases numbered 24, of which 7 were connected with premature labours, as against an average of 25 in the 16 years 1905-20.

The attack-rate per 1,000 births was 12·67, against 7·15 in 1924, whilst the case fatality per cent. was 13·4, against 21·0, the average for the 20 years 1905-1924.

The mortality from puerperal fever per 1,000 births was 1·27, against an average of 1·55 in the preceding 10 years.

Table relating to the cases of puerperal fever attended either by midwives or doctors during 1925, as compared with the average of the 20 years, 1905-1924 :—

Years	Number of Cases attended by					
	Midwives		Doctors		Midwife and Doctor	
	Attacks	Deaths	Attacks	Deaths	Attacks	Deaths
1905-1924 ...	39	6	70	16	20	5
1925	52	4	116	17	11	3

Out of 179 cases notified during 1925, 11 patients were nursed at home, and recovered. 151 cases were removed to Monsall Hospital and 131 recovered.

The remaining 17 cases were treated in other institutions, and 13 recovered.

In 1925 subsequent visits have been paid to 117 women, and 105 were found to be in good health.

The particulars as to the character of the labour and the results for 1925 are :—

	No. of Cases	Recovery	Death
	1925	1925	1925
Normal full term labour	84	78	6
Abnormal full term labour	45	34	11
Abortion or premature	50	43	7

This number includes 32 cases from outside districts which were delivered in hospital, having been sent in owing to some abnormal condition of pregnancy or labour.

PEMPHIGUS NEONATORUM.

Owing to the large number of cases of pemphigus neonatorum having occurred in the City during the first six months of the year, the Medical Officer of Health recommended that this disease should be dealt with as an emergency under Section 7 (6) of the Infectious Disease (Notification) Act, 1889. On September 10th, 1925, pemphigus neonatorum became notifiable in the City for a period of six months.

From September 10th to December 31st, 1925, 83 cases of pemphigus neonatorum were notified, 51 of these cases being infants under 11 days old. The remainder occurred at the following ages :—14 at 2 weeks, 12 at 3 weeks, 2 at 4 weeks, 2 at 2 months, and 2 under 4 months. The total fatal cases were 6.

Sixty-three of these cases were nursed by the Special Nurses.

The following table shows the number of cases occurring in the practice of midwives, doctors, and institutions :—

Year	Midwives		Doctors		Midwives and Doctors		Institutions	
	Attacks	Deaths	Attacks	Deaths	Attacks	Deaths	Attacks	Deaths
1925	47	5	8	0	8	0	20	1

MATERNAL DEATHS.

During the year 1925, 23 maternal deaths from causes other than puerperal sepsis were notified. The causes given are set out in the following table :—

Dystocia, obstetric shock ..	4	Ruptured uterus	1
Eclampsia..	5	Adherent placenta (collapse).	2
Hyperemisis gravidarum ..	1	Complicated labour	1
Abortions	2	Oedema of glottis..	1
Pulmonary embolism	1	Cardiac failure following confinement	2
Hæmorrhage	3		

Careful investigation was made into the circumstances relating to the deaths of the above cases.

SUSPENSION OF MIDWIVES.

During 1925, 218 suspensions of midwives from their work occurred, chiefly on account of their having been in attendance on cases of puerperal infection or other septic conditions.

RECORDS OF CALLING IN MEDICAL AID.

During the year 1925 the number of medical records received was 3,348, as compared with 3,485 in the previous year. The numbers under the various reasons given for having advised medical aid correspond to those in previous years (see table on next page).

Number of Cases occurring in 1925 in which the Midwife advised that a Registered Medical Practitioner should be sent for (Rule E). Also the Number of Applications from Medical Practitioners for Payment of their Fees for Attending Certain Emergency Cases.

Period	Medical aid called in on account of the following causes, as stated by the Midwife			Total	* Application for Fees
Pregnancy	Abortions, miscarriages			25	13
	Deformed pelvis			3	3
	Loss of blood			12	2
	Other unusual features of pregnancy			58	34
Labour	Presentations	Head—Malpositions		1	9
		Breech	In primiparæ	16	1
			In multiparæ	2	—
			Para not stated	37	28
		Transverse		6	12
		Funis		17	6
		Unable to make out		30	11
		Footling		22	7
		Hand		17	2
	Tedious labour	Forceps used		4	213
		No record as to forceps		528	78
	Placenta	Retained		33	21
		Adherent		21	14
		Prævia		3	4
	Membranes retained			11	4
	Rupture of perineum			765	309
	Hæmorrhage	Ante partum		47	47
		Post partum		52	28
		Hæmorrhage—3rd stage		—	3
	Convulsions			3	7
	Complications			99	16
	Premature labour			24	4
Lying-in	Abdominal swellings			1	—
	Foul-smelling discharges			—	—
	Secondary post-partum hæmorrhage			4	1
	Rigor			—	—
	Rise of Temperature above 100·4° F			48	23
	Unusual swelling of breasts			25	4
	Progress unsatisfactory or complications			296	88
Newly-born Child	Injuries received during birth			6	2
	Obvious malformations			75	32
	Tongue-tied			87	13
	Feebleness of child			97	53
	Inflammation of eyes and eyelids			399	123
	Skin eruption			64	37
	Illness from prematurity			79	19
	Jaundice			57	16
	Inflammation about the umbilicus			—	9
	Unspecified or complications			215	16
	Convulsions			12	6
	Pemphigus Neonatorum			47	—
	TOTALS			3,348	1,318

* These applications have been classified according to the conditions requiring treatment found by the medical practitioner.

MIDWIVES ACT, 1918—MEDICAL ASSISTANCE TO MIDWIFE IN CASE OF EMERGENCY.

Under Section 14 (1) of this Act a midwife is required, in case of any emergency as defined in the rules, to call in to her assistance a registered medical practitioner, and the local supervising authority is required to pay such medical practitioner a fee as prescribed by the Ministry of Health. The local supervising authority has power to recover the fee from the patient or husband unless they are unable, by reason of poverty, to pay such fee.

Particulars of applications from medical practitioners for the payment of their fees :—

	1924	1925
No. of families whose incomes were below the scale	354	372
No. of families whose incomes were above the scale	869	881
No. of families who paid doctor themselves ..	51	33
Conditions not fulfilled	14	32
No. awaiting investigation	11	—
No. paid by Local Supervising Authority ..	1,223	1,253
	£ s. d.	£ s. d.
Amount of fees paid	1,297 12 0	1,286 14 0
Amount recovered from people who were in a position to pay	478 4 0	542 17 0
No. of applications for fees received from midwives	13	5
No. paid	10	2
Amount paid to midwives	£6 7 6	£1 5 0

STILL-BIRTHS.

	No. reported	No. in practice of		Percentage to Total Births
		Doctors	Midwives	
1924	472	306	166	3·2
1925	523	329	194	3·7

The summary of causes to which it seemed reasonable to credit the still-births shows the principal numbers to be :—

	1924	1925
Definite history of ill-health of the mother	58	57
Accident to the mother before confinement	29	25
Congenital deformities	8	5
Shock	8	10
Probable drug-taking to procure abortion	..	..
Breech presentations, full time and premature	15	15
Employment of mother	4	6
Ante-partum hæmorrhage..	6	3
Insufficient help at delivery	6	16
Probable specific disease from family history	5	5
Twin pregnancies—full time and premature	4	4
Abnormal presentations	4	6

In 1925 the still-birth rate was highest in Gorton, Ardwick, and Openshaw.

DEATHS OF NEW-BORN CHILDREN.

Notifications of 11 deaths of new-born children before a medical practitioner could be obtained were received and investigated during 1925. In 8 instances inquests were held. In 1 case " Want of attention at birth " was the verdict, natural causes 5, and in 2 "Accidental suffocation." In 3 cases the City Coroner did not consider it necessary to hold inquests.

CHARGES OF MALPRACTICE, NEGLIGENCE, OR MISCONDUCT.

During the year 1925, 5 midwives were summoned to appear before the Maternity and Child Welfare Sub-Committee, to answer charges of negligence. The Committee found it necessary in the case of 2 of these midwives to make a report under this heading to the Central Midwives Board.

Case 1.—The midwife failed to call in medical aid on account of serious skin eruption of the newly-born infant, which resulted in the child's death. The midwife was removed from the roll, having previously been warned for a similar offence.

Case 2.—The midwife was found guilty of employing an unqualified substitute, and also of entering false records in her pulse and temperature book. The Board decided to postpone sentence, and requested the Local Supervising Authority to supply reports in 3 and 6 months, on the midwife's methods of practice. A satisfactory report was subsequently forwarded to the Board.

WORK OF THE SPECIAL NURSES.

The work done by the nurses during the year 1925 has been tabulated, and is as follows :—

	1924	1925
Still-births investigated	166	184
Deaths of newly-born infants investigated	18	11
Cases of Puerperal Fever nursed at home	12	11
Nursing visits paid to Puerperal Fever cases and to patients with raised temperatures	600	497
Old Puerperal Fever cases investigated to ascertain subsequent histories	82	100
New Puerperal Fever cases investigated to ascertain histories	106	104
Nursing visits paid to cases of Mammary Abscess.. ..	241	227
,, ,, ,, Inquinal Abscess	—	28
,, ,, ,, Phlebitis	54	56
,, ,, ,, Varicose Ulcer of Leg ..	—	12
,, ,, ,, houses infected with Chicken Pox	—	11
,, ,, ,, houses infected with Scarlet Fever	24	44.
,, ,, ,, houses infected with Erysipelas	16	3
,, ,, ,, houses infected with Diphtheria	11	7
,, ,, ,, houses infected with Measles	110	44
Number of cases of Pemphigus Neonatorum and other skin affection in newly-born infants	114	204
Nursing visits paid to these infants	952	1,820
Number of nursing visits paid to cases of Spina Bifida..	106	127
,, ,, ,, ,, cases of Septic and unsatisfactory Umbilicus	526	747
,, ,, ,, ,, cases of Ophthalmia Neonatorum	475	37
,, ,, ,, ,, cases of Septic Conditions of Perineum	—	135
Special investigation visits concerning medical records, including visits paid to doctors and others	386	202
Special investigations into births..	370	345
,, ,, ,, maternal deaths	30	22
Nursing visits paid for midwives during suspension and when unable to obtain a qualified substitute	22	10
Unclassified nursing visits paid to mothers and infants ..	127	263
	4,548	5,251

STATEMENT OF WORK DONE AT THE CHILD WELFARE CENTRES DURING THE YEAR 1925 COMPARED WITH THE AVERAGE OF THE FIVE YEARS 1920-24.

		72, Rosamond Street West, C.-on-M.	1, Manipur Street, Openshaw	135, Pollard Street, Ancoats	93, Hamilton Street, Collyhurst	230, Hyde Road, West Gorton	153, Cheetham Hill Road	42, Lower Moss Lane, Hulme	45, Higher Ardwick	Abbey Hey Lane, Gorton	686, Oldham Road, Newton Heath	Jubilee Schools, Harpurhey	Elm Street	Holy Name	Total
Number of weighings of Babies	Average	13,913	24,627	10,190	14,020	15,789	8,888	7,765	13,500	4,189	9,022	8,735	2,687	1,216	134,541
	1925	15,141	23,971	12,694	15,335	17,138	8,487	9,887	18,345	5,842	12,409	9,465	3,752	1,220	153,686
Number of New Cases	Average	914	1,257	612	860	914	565	466	686	205	472	444	159	113	7,667
	1925	772	1,093	753	685	776	446	439	785	201	441	432	207	83	7,113
Number of Consultations	Average	5,478	9,987	4,527	6,988	7,700	4,518	3,749	5,576	1,779	4,559	3,992	1,172	790	60,815
	1925	5,637	9,815	5,004	6,455	7,450	3,624	3,876	7,792	2,538	5,885	4,066	1,654	687	64,483
Number of attendances for Massage	Average	1,040	2,194	709	1,895	1,174	882	567	1,120	—	945	542	—	—	11,068
	1925	1,362	2,849	1,270	2,388	1,622	1,154	948	1,599	166	1,412	745	120	—	15,635
Visits to Homes by Superintendents	Average	690	1,107	1,184	1,015	1,222	1,108	1,022	628	664	978	533	289	4,483	14,923
	1925	611	1,055	1,114	1,067	1,652	1,203	1,014	484	334	1,109	562	311	3,620	14,136
Number of individuals who attended Centres	Average (2 years)	1,420	2,163	1,102	1,385	1,637	874	722	1,219	352	967	840	260	178	13,119
	1925	1,403	2,120	1,202	829	1,444	805	768	1,341	411	939	756	327	167	12,512
Number of Attendances at Pre-maternity Clinics	Average	158	237	79	114	118	123	124	214	—	97	—	—	—	1,264
	1925	136	268	100	108	131	105	193	325	—	212	—	—	—	1,578
Number of Attendances at Dental Clinic	Average	410	—	—	—	—	—	—	—	—	—	—	—	—	410
	1925	455	—	—	—	—	—	—	—	—	—	—	—	—	455
Number of Attendances at Venereal Disease Clinics	Average	—	—	—	—	—	—	400	650	—	—	—	—	—	1,050
	1925	—	—	—	—	—	—	365	590	—	—	—	—	—	955

PROVISION OF MILK FREE OR AT REDUCED COST DURING THE YEAR 1925 COMPARED WITH AVERAGE FOR THE FIVE YEARS 1920-1924.

Statement showing Number of Cases receiving Milk, Amount Sold, Cost, and Mode of Distribution.

			70–72, Rosamond Street West	1–3, Manipur Street	153, Cheetham Hill Road	135, Pollard Street	93, Hamilton Street	230, Hyde Road, West Gorton	40–42, Lower Moss Lane	45, Higher Ardwick	Jubilee Schools, Harpurhey	686–8, Oldham Rd., Newton	Abbey Hey Lane	Elm Street School	Didsbury	Levenshulme	Rusholme	Chorlton-cum-Hardy	Total
Number of New Cases put on Milk	Fresh Milk ...	Average ...	137	462	91	164	242	182	112	166	73	65	42	27	5	22	28	2	1,820
		1925	197	378	47	173	215	219	112	219	68	77	51	52	13	42	58	4	1,925
	Dried Milk	Average ...	79	172	34	100	142	98	48	99	53	59	24	22	—	10	9	—	949
		1925	111	185	34	296	251	153	109	163	50	80	31	46	—	3	17	—	1,529
Total number having Milk	Fresh Milk ...	Average ...	2,353	8,403	1,965	2,753	3,426	3,758	1,693	2,877	1,182	964	1,069	301	188	387	718	44	32,081
		1925	3,496	7,460	1,761	3,495	4,312	4,307	2,392	5,816	1,876	1,623	1,541	672	248	921	1,448	39	41,407
	Dried Milk ...	Average ...	2,117	3,818	713	2,407	2,835	2,345	1,097	2,154	1,007	1,041	709	296	—	115	346	—	21,000
		1925	2,479	4,688	899	4,732	5,034	2,875	1,968	4,307	908	1,475	954	770	—	126	568	—	31,783
Amount of Milk being sold (Pints or Lbs.,	Fresh Milk ...	Average ...	17,379	60,807	14,993	19,981	24,926	27,317	12,569	20,937	8,608	7,131	7,561	2,120	1,431	2,882	5,314	313	234,269
		1925	24,520	52,080	12,353	24,395	30,252	30,149	16,739	40,837	13,644	11,575	10,794	4,700	1,771	6,512	10,201	273	290,803
	Dried Milk ...	Average ...	2,260	3,973	769	2,581	2,960	2,461	1,178	2,235	1,068	1,149	744	326	3	148	380	—	22,235
		1925	2,510	4,824	985	4,764	5,112	2,893	2,086	4,488	916	1,539	977	787	—	126	575	—	32,582
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Total Cost to Corporation	Fresh Milk ...	Average ...	162 18 10	528 18 10	169 0 2	155 0 7	212 19 5	216 16 3	121 2 6	180 17 3	74 10 7	64 17 6	57 13 1	16 5 6	13 3 8	28 5 1	48 15 11	2 0 5	2,053 5 7
		1925	157 10 2	356 1 5	98 19 9	167 9 5	229 4 5	199 3 10	101 15 0	276 19 4	94 13 8	73 8 3	67 16 1	36 12 2	11 14 7	40 15 6	61 0 3	2 4 1	1,975 7 11
	Dried Milk ...	Average ...	130 7 4	234 3 9	52 13 5	143 2 1	172 19 10	134 0 5	71 5 7	118 3 0	67 6 2	63 19 4	40 3 9	17 4 5	7 10	9 4 5	19 11 2	—	1,274 12 6
		1925	115 10 0	224 19 1	54 14 9	208 11 6	267 5 0	131 17 0	99 17 6	221 8 9	43 10 0	67 1 9	44 16 3	40 15 3	—	5 15 1	25 2 0	—	1,551 3 11
Total ...	Fresh and Dried	Average ...	293 6 2	763 2 7	221 13 7	298 2 8	385 19 3	350 16 8	192 8 1	299 0 3	141 16 9	128 16 10	97 16 10	33 9 11	13 11 6	37 9 6	68 7 1	2 0 5	3,327 18 1
		1925	273 0 2	581 0 6	153 14 6	376 0 11	496 9 5	331 0 10	201 12 6	498 8 1	138 3 8	140 10 0	112 12 4	77 7 5	11 14 7	46 10 7	86 2 3	2 4 1	3,526 11 10

MATERNITY HOMES AND HOSPITALS.

Under the Manchester Corporation (General Powers) Act, 1921, provision has been made for the registration of maternity homes, and bye-laws have been made in accordance with Section 53 of the Act. The bye-laws were given in detail on pages 175-176 of the Annual Report for the year 1921.

During the year 1925, 9 applications for registration were received. Of these 3 were approved, 3 were refused on the grounds of unsuitability of person and premises, and 3 were held in abeyance.

Since the Act came into force 29 homes have been registered and 6 discontinued for various reasons, leaving 23 homes on the register at the end of the year.

In connection with 13 houses reported to have received maternity cases without having been registered for the purpose, legal proceedings were taken in two instances. In one case a fine of 40s. and costs was imposed by the magistrates, the other being fined £5. A third case was fined £5 for continuing to receive patients when application had been refused. In five other instances cautionary letters were sent by the Town Clerk. No action was found to be necessary in the remaining cases.

SUBSIDISATION OF MATERNITY BEDS.

The Maternity and Child Welfare Sub-Committee subsidise 6 beds at Crumpsall Auxiliary Hospital. Applicants for admission must be Manchester residents, and are required to contribute half the cost of the maintenance charges. There has not been the demand anticipated, as the following figures will show.

During the year 1925, 15 applications were received, 8 of which were admitted for confinement. Of the remaining 7, one was confined prematurely at her home, 3 made other arrangements, and 3 did not fulfil the necessary conditions.

SUMMARY OF WORK OF INVESTIGATORS FOR 1925.

No. of visits in connection with :—	1925	
Milk Investigations—New cases	4,663	8,667
,, Reinvestigations	4,004	
Medical Fees—New cases	1,390	1,613
,, Reinvestigations	212	
,, Special investigations	11	
Total visits		10,280

Centre Work :—	1925
Superintendent's duties	35½ days
Milk Clerk's duties	65 ,,
Office Work :—	
Clerical duties	71½ ,,
Total	172 days

OPHTHALMIA NEONATORUM.

By Dr. M. A. C. Douglas Drummond.

During the year 1925 849 cases of inflammation of the eyes were notified from various sources, and visited by the Eye Nurses.

Of these, 316 were cases of disease in children and adults. 210 suffered from simple conjunctivitis, 37 from blepharitis, 2 from Keratitis, and 2 glioma ; 24 were cases of corneal ulcer, 26 had nebula of cornea, and 1 dermoid cyst ; 3 children had lachrymal obstruction, 2 strabismus, 3 cataract, 3 defective vision, 1 dacryocystitis, 1 ptosis of lid, and 1 orbital abscess.

In 1925 533 cases of inflammation of the eyes of newly-born children occurred ; 266 were notified by the medical attendants (either private or at the Royal Eye Hospital) as cases of ophthalmia neonatorum. The remaining 267 cases were notified by midwives.

Swabs were taken from the conjunctiva in all cases where possible, and sent to the Public Health Laboratory to be examined bacteriologically for the presence of gonococcus. Thirty-one swabs were examined, and of these 10 gave a positive result.

Table A shows the distribution of cases, both as regards the districts in which they occurred and the month of the year. The cases in which the cornea wa affected are also shown in this table.

In 1925 the largest number of cases of true ophthalmia neonatorum occurred in Hulme, Chorlton-upon-Medlock, Newton Heath, and St. George's (Collyhurst)

The monthly rate of notified cases varies considerably, and there seems n special reason for the rise and fall in numbers. February heads the list, followed by July, April, and October.

TABLE A, 1925—NOTIFIED CASES OF OPHTHALMIA NEONATORUM, ALSO CASES REPORTED BY MIDWIVES BUT CONSIDERED TO BE CASES OF CONJUNCTIVITIS.

Month of Year	January	February	March	April	May	June	July	August	September	October	November	December	Total	Cases of Conjuncti-vitis reported by Midwives	Cases with Corneal Com-plications
Ancoats	1	2	3	1	—	3	5	2	2	—	—	1	20	12	—
Central	—	—	1	—	—	—	—	—	—	—	—	—	1	1	—
Collyhurst	1	5	1	2	4	1	1	2	2	1	3	1	24	79	—
Cheetham	—	3	1	1	—	4	2	2	—	1	—	2	16	11	—
Crumpsall	—	1	—	—	—	1	—	—	—	—	—	—	2	—	—
Blackley	—	—	—	1	2	1	—	—	—	—	1	1	6	2	1
Harpurhey	—	2	—	1	—	—	—	2	1	1	—	—	7	9	—
Moston	—	—	1	1	1	—	—	—	—	—	—	—	3	1	—
Newton Heath	2	5	—	1	3	2	4	1	2	—	4	1	25	31	—
Bradford	2	1	—	3	—	—	2	2	—	—	—	1	11	9	1
Beswick	—	—	—	—	—	—	3	1	1	1	—	1	7	14	—
Clayton	—	—	—	—	2	—	2	—	—	1	—	—	5	—	—
Ardwick	—	3	1	4	3	2	1	2	1	4	1	1	23	5	1
Openshaw	1	—	—	—	2	—	—	—	—	—	2	1	6	1	—
West Gorton	—	—	—	—	—	—	—	1	2	—	—	2	5	10	1
Rusholme	—	1	1	2	—	—	—	—	—	2	—	—	6	2	—
Chorlton-upon-Medlock	3	3	5	2	1	3	2	1	3	4	3	1	31	10	—
Hulme	5	1	4	4	1	1	1	2	3	4	5	3	34	32	2
Moss Side	2	—	—	1	2	2	—	2	1	2	—	—	12	7	—
Withington	—	—	—	—	1	—	—	—	—	—	—	—	1	1	—
Gorton	2	2	1	1	—	1	2	—	1	—	3	1	14	28	—
Levenshulme	2	—	—	—	—	—	2	1	—	2	—	—	7	2	—
Total	21	29	19	25	22	21	27	21	19	23	22	17	266	267	—
Cases with Corneal Complications ...	—	—	—	—	1	1	—	1	1	1	1	1	—	—	7

TABLE B—1925. OPHTHALMIA NEONATORUM. HISTORY OF MOTHER.

	Age of Mother							Parity										Labour		Attendant not present at birth	No. of mothers having had previous cases of Ophth. Neon.	History of yellow discharge	Legitimacy	
	Under 20	20—	25—	30—	35 and Over	Not ascertained	Total	1	2	3	4	5	6	7	8	9+	Not Ascertained	Normal	Abnormal				Legit.	Illegit.
Notified Cases, 1925	9	56	92	52	48	9	266	65	72	47	22	15	19	10	3	10	3	252	14	22	25	18	260	6
Not Notified ...1925	10	50	75	28	42	62	267	48	67	50	28	24	17	11	4	17	1	257	10	16	20	3	264	3
Corneal Cases, 1925	—	—	2	3	2	—	7	2	1	—	—	—	1	2	—	1	—	6	1	2	1	1	6	1

	1925
Total cases notified	266
Total cases not notified	267
	533

TABLE C—1925. OPHTHALMIA NEONATORUM.

	Interval in days between birth and onset											Attended by				Where treated				
	1	2	3	4	5	6	7	8	9	10+	Total	Midwife	Doctor	Midwife and Doctor	Total	Home	Out-Patients at Hospital	In-Patients at Hospital	No Doctor	Total
Notified Cases, 1925	29	22	20	20	25	26	30	22	22	50	266	182	69	15	266	128	129	9	—	266
Not notified ... 1925	22	29	23	24	28	28	21	29	22	41	267	258	—	9	267	238	7	—	22	267

	1925
Total cases notified	266
Total cases not notified ...	267
	533

Table C shows the day of onset, the attendant at birth, and the place of treatment.

In 1925 the greatest number of onsets was on the seventh day of life, and in over one-half of the cases the first signs of disease appeared during the first five days.

In 1925 128 cases were treated by private doctors and 138 by the Royal Eye Hospital.

In 7 instances there was involvement of the cornea, and of these 4 cases were admitted into the Royal Eye Hospital.

The number of cases with corneal involvement was 7 in all, being a decrease of 5 of last year. Four have completely recovered, and 3 have nebula cornea, which will clear.

TABLE D.—CASES WITH INVOLVEMENT OF THE CORNEA.

	1924	1925
Right Eye..	2	5
Left Eye	5	2
Both Eyes..	5	—
	12	7

Table E shows the results of the 266 cases of ophthalmia neonatorum, and of the 267 of conjunctivitis in *newly-born infants*.

	Complete recovery		One Eye lost, other normal		One Eye lost, the other damaged		Both Eyes lost		Both Eyes damaged		One Eye damaged		Death before recovery		Removed before recovery		TOTALS	
	1924	1925	1924	1925	1924	1925	1924	1925	1924	1925	1924	1925	1924	1925	1924	1925	1924	1925
Ophthalmia Neonatorum	312	244	..	..	..	..	..	..	..	..	..	3	12	12	12	7	336	266
Conjunctivitis ..	233	263	..	..	..	..	..	..	..	..	..	..	3	3	..	1	236	267

Table F showing the total number of cases of ophthalmia and conjunctivitis in newly-born infants, and the percentage with corneal complications, 1911-1925 :—

Year	No. of Cases	Percentage with Corneal complications
1911	525	7·23
1912	667	11·39
1913	573	12·04
1914	681	9·25
1915	642	7·79
1916	620	6·13
1917	539	6·86
1918	567	8·64
1919	698	4·73
1920	974	4·83
1921	921	2·28
1922	760	1·84
1923	836	1·20
1924	853	1·41
1925	849	0·82

PUBLIC HEALTH (MEAT) REGULATIONS, 1925.

These Regulations which came into force on May 1st, 1925, are administered by the Public Health Committee in so far as part V., which relates to shops, stores, etc., is concerned. With a view to the equitable administration of the Regulations the co-operation of the interested trades was sought and mutual agreement with the associations concerned was arrived at on the following points :—

Requirements.

1. Meat shall not be hung outside premises.

2. All meat which is displayed must be protected from the dust of the street by glass windows.

3. Reasonable precautions must be taken to protect meat from flies.

4. The provision of a covered receptacle of suitable material for refuse and sweepings is imperative and the receptacle must be kept clean.

5. Shops must be adequately ventilated.

6. Particulars of structural arrangements required in premises where food is prepared may be obtained on application to the Medical Officer of Health.

Suggestions.

1. That means be adopted for keeping all prepared meats covered. (Transparent paper could be used with good effects.)

2. That each shop be provided with a cold store or ice box for the storage of meat.

3. That persons engaged in the sale or handling of meat should wear white overalls. (Coloured ones now in use when worn out to be replaced by white.)

4. That notices be exhibited in shops to the effect that foodstuffs should not be handled by customers.

5. That wherever possible, vertical glass fronts be provided on counters to protect meat, etc., from contact with or handling by customers.

These requirements and suggestions are generally being carried out. In some cases a cautionary letter has been necessary, and in one instance court proceedings had to be taken, resulting in the imposition of a penalty and the subsequent closing of the premises, which were entirely unsuitable for the purpose for which they were used.

BAKEHOUSES AND OTHER PREMISES IN WHICH FOOD IS PREPARED.

The total number of visits made by Inspectors to bakehouses during the year was 3,580, and their routine work is referred to on page 187.

Visits were made in connection with 21 applications for approval of the use of premises as bakehouses, with the result that 2 were considered unsuitable and 19 were approved, subject to the fulfilment of certain conditions.

Forty-one applications for sanction to the establishment of fish frying businesses were considered by the Public Health Committee. Twenty-six were granted, subject to the requirements of the Medical Officer of Health being completed satisfactorily, and 15 were refused on the grounds of unsuitability of the premises or the site.

Supervision of all places where food is prepared has been maintained and minor alterations and improvements have been obtained in many cases without formal notice. In certain cases more extensive alterations have been required and these have been dealt with by serving a specification prepared by the Housing Manager with the following results :—

Nature of Business	District	Specification sent	Result December 31st, 1925.
Pickle factory..	Openshaw ..	12-3-25	Work completed.
Pork butcher	Hulme	6-4-25	Work completed.
Gut cleaning works ..	Blackley ..	26-5-25	Work completed.
Pickle works	Harpurhey ..	28-5-25	Premises closed.
Potted meat works ..	Moston	16-6-25	Nothing done.
Butcher	Ardwick ..	10-7-25	Premises demolished.
Fried fish works	Ardwick ..	13-7-25	Premises demolished.
Butcher	Cheetham ..	24-9-25	Nothing done.

FOOD POISONING.

During the year 1925 food poisoning was suspected in 9 instances; 3 were reported by the Police Department, 4 by medical practitioners, 1 by a member of the public, and the remaining one came to our notice through a report upon a blood examination carried out at the Public Health Laboratory.

On investigation it was found that in 5 instances there was no evidence of food poisoning.

In the remaining 4 instances there was evidence of food poisoning, but the information was received too late to carry out the investigations with any great prospect of success in tracing the source of infection.

The patients recovered after a short illness in three of these four outbreaks.

In the fourth outbreak, a frail old lady of 75 years, who was an inmate of a house where a child had suffered from diarrhœa and vomiting, developed similar symptoms and eventually died. Although no suspected food was available for examination, an organism resembling Morgan's No. 1 bacillus was isolated from the organs of the old lady mentioned, and it may be reasonably assumed that this was the organism responsible for her death and the symptoms in the child.

Food Poisoning.—Summary, 1921–1925.

During the five years 1921–1925 several cases of food poisoning were investigated, but the only important outbreaks occurred in the summer of 1922 (3 outbreaks) and the summer of 1924 (1 outbreak).

These outbreaks have been fully reported in the Annual Reports for their respective years.

It may, however, be of interest to mention that in three of the four outbreaks where a death occurred the organism implicated was the B. Aertrycke, one of the Gaertner group of organisms, commonly associated with outbreaks of food poisoning.

Frequently the first intimation received of suspected cases of food poisoning comes from the Coroner's Officer, although in recent years medical practitioners have occasionally notified the department of illnesses of a suspicious nature.

WORK DONE BY SPECIAL INSPECTORS DURING 1925.

Inspection of Dairies, milkshops	2,403
,, Ice-cream manufactories	48
,, Food preparation places	68
,, Dwelling-houses under Housing Acts	180
,, Market places. Meat regulations, 1924	21
,, Shops and slaughter-houses. Meat regulations, 1924	18
,, Allotments and stables	27
,, Vermin invested premises and goods	28
,, Offensive trades and nuisances	8
,, Proposed Child Welfare Centres	12
Visits *re* Scarlatina hospital patients' subsequent health	543
,, Diarrhœa	50
,, Chickenpox, smallpox, pneumonia, influenza	9
,, Rat infested premises	48
,, ,, ,, Examination of drains	5
,, Food poisoning cases	22
,, Gas poisoning cases	16
,, Arsenic in sweets	35
,, Iodised salt	8
,, Disinfection of premises	13
,, Miscellaneous matters	57
Visits to Laboratory. Cold Air Stores	19
Samples of Milk. Pasteurised, Grade A, and as supplied to Day Nurses' Nurseries	477
,, Filter cloths	4
,, Salt, common, table, and iodised	7
,, Sweets	64
,, Suspected food	1
Specimens of Lepisma saccharina	1
,, Urine	3
,, Beetles	12
Prosecution—Meat Regulations	1
Fine	£20
Housing statistics, etc. ..days	86

REPORT OF THE SANITARY SECTION.

By Mr. J. Walton, Chief Inspector, and
Mr. H. B. South, Chief Clerk.

In presenting to the Medical Officer of Health the report of the work transacted in the Sanitary Section for the year ending 31st December, 1925, we beg to state that the City, for inspection and other purposes, is divided into 35 Districts, to each of which one Sanitary Inspector has been assigned.

In addition to these there is one Chief Inspector, two Drainage, three Smoke, one Canal Boats, two Lodging-house, three Adulteration of Food, and ten Factory and Workshops Inspectors (including two Female Inspectors), and four Drainage Excavators. There is also a Chief Clerk and a staff of 29 Clerks for administrative, clerical, and other work.

During the month of December the Inspectorial Staff were working under a reorganisation scheme, but for the purposes of this report the work and staff have been dealt with on the previous basis.

In the Drainage Department (which is under the Housing Manager) there are also four Clerks and three Clerks of Works for supervising and measuring up work done by the contractors employed by the department in carrying out private drainage work.

In connection with the Public Conveniences there is a Foreman with an Assistant, a Female Supervisor, and staff of 42 male and 23 female Attendants and Cleaners. At the Municipal Hostels there is a Manager and Assistant, with a staff of 37 Porters, Laundresses, etc., at Walton House (Males), and a Manageress and staff of 16 Portresses, etc., at Ashton House (Females). This work is under the supervision of the Chief Clerk.

The number of complaints of nuisances of various kinds made during the year was 7,955 :—

1,738	through the Medical Officer of Health's Department.
5,655	by the public.
9	through the Police.
553	through other sources.

HOUSES LET IN LODGINGS.

Under the powers given by section 90 of the Public Health Act the bye-laws made thereunder have been enforced.

The number of houses on the register is 2,405. To these, 9,549 day visits have been paid. 107 infringements of the regulations have been reported and dealt with.

WORKSHOPS, BAKEHOUSES, SHOPS ACTS, AND ORDERS MADE THEREUNDER.

Workshop Acts

During the year the Factory and Workshop Act of 1901 has received the careful attention of the Male and Female Inspectors specially appointed for the duties, the Female Inspectors devoting a large portion of their time to visiting the 1,578 houses of outworkers in the City.

Means of Escape in case of Fire

Provision for means of escape in case of fire in factories and workshops has also received attention, and all known cases of danger have been dealt with.

Periodical changes will, of course, take place from time to time in various ways which will bring buildings within the meaning of the Act, and necessitate the constant supervision of the Inspectors and action on the part of the Authorities.

Bakehouses

The number of bakehouses in the City is 656; of these, 47 are situate in basement premises, and special attention has been given to them.

Shops Act

The Shops Act, which came into force on the 1st May, 1912, has received attention, registers of all shops having been prepared. Orders of Exemption from compulsory closing have been made in 33 trades. In 6 trades Orders have been made fixing the day for the weekly half-holiday, and in 3 trades Orders have been made fixing the closing hour for the several days of the week.

Outworkers

Many visits have been paid to houses in various parts of the City in which outwork is carried on, as will be seen on reference to the following tabulated statement, but constant visitation is necessary to maintain the standard of cleanliness which is to be desired, especially in houses in which shirt-making, handkerchief-hemming, brace-making, and umbrella-covering, etc., is done.

The people, as a rule, appear willing to carry out any suggestion made by the Inspectors to keep their houses clean; but at the same time it is almost impossible for small houses, sometimes containing large families, to be kept in such a satisfactory condition as workshops.

Table showing the work done by the Inspectors under the Factory and Workshop and Shops Acts during 1925.

INSPECTOR	SHOPS			FACTORIES AND WORKSHOPS.							BAKEHOUSES					OUT-WORKERS		Total number of Inspections
	No. visited	No. of infringements reported to the Committee		No. visited	No. of premises in which Sanitary defects were found	Not provided with proper means of escape in case of fire	Means of escape in case of fire not being maintained in accordance with the requirements of the Act.	No. of cases reported to the Factory Inspector	No. of infringements reported to the Committee	No. of cases in which magisterial proceedings have been taken	No. visited	No. of premises in which Sanitary defects were found	No. of reports referred to Factory Inspector	No. of infringements reported to the Committee	No. of cases in which magisterial proceedings have been taken	Visits to houses where out-workers are employed	Houses found dirty	
		No. of cases in which magisterial proceedings have been taken	No. cautioned by Committee															
Richard Tolson	1031	1	4	2159	103	9	37	28	3	2	361	35	1	...	...	...	...	3551
A.E. Beaumont	1491	1	10	2175	43	2	15	24	...	...	566	9	4	...	...	...	...	4232
Thomas Nicholson	2328	...	8	2079	49	...	12	48	..	...	375	31	1	..	...	...	...	4782
Thomas A. Linfoot	2400	...	2	1653	32	...	2	43	...	...	817	45	6	...	...	...	...	4870
*Henry Pollitt	121	...	8	170	5	...	..	4	...	...	82	6	...	...	...	...	...	373
Ernest Dooley	1071	5	13	1771	73	5	5	64	...	...	1065	102	7	...	...	..	...	3907
George Vernon	1439	6	9	2285	111	15	44	126	...	...	153	15	2	...	...	...	...	3877
Mrs. Rosa G. Clift	872	...	...	421	16	...	...	...	...	...	...	...	...	...	...	...	...	7222
Miss Margaret F. Gunn	1110	...	...	2016	25	...	...	1	...	...	...	...	...	...	...	5929	4	5936
District Inspectors	146	...	...	890	...	...	...	...	...	...	100	...	...	...	...	2810	2	1136
Totals	12009	13	54	15619	457	31	115	338	3	2	3519	243	21	...	...	8739	6	39886

Totals on Registers—Shops, 19,385; Workshops, 3,003; Factories, 3,676; Bakehouses, 656; Outworkers, 1,578.

* Inspector H. Pollitt engaged drain examining the greater part of the year.

Table showing the Number and Classification of Persons employed as Outworkers by firms within the City, and the Number of such Firms.

Trades	No. of Employers	No of Outworkers or Contractors employed
Makers of Wearing Apparel	326	1376
Button Carding	1	2
Cabinet Makers and Upholsterers	3	9
Artificial Flower Makers	1	1
Chamois Mops	1	9
Furriers	1	4
Fent Sorters	1	1
Handkerchief Hemmers	5	14
Lace, Lace Curtains, and Nets	4	17
Opticians	1	2
Quilt, Cushion, etc., Makers	4	75
Umbrella Trimmers	17	171
Window Blinds	1	1
Watch and Clock Repairers	1	1
Shopping Bag Makers	2	58
Sponge Cloths, Dusters, etc.	2	9
Totals	371	1750*

*1,578 of these are in the City, the remainder are in the districts of other Local Authorities, to whom lists showing the names and addresses have been sent.

TABLE SHOWING THE PROCEEDINGS TAKEN UNDER THE PROVISIONS OF THE ADULTERATION OF FOOD AND DRUGS AND THE MARGARINE ACTS DURING 1925.

ARTICLE	Number of Samples Obtained	Number Adulterated	Number not Adulterated	Number Summoned before Magistrates	Number Fined	Number Ordered to Pay Costs only	Number Dismissed or Withdrawn	Number Cautioned by Committee	Number of Samples slightly Adulterated or Informal	Amount of Fines Imposed	Amount of Costs Ordered to be Paid
										£ s. d.	£ s. d.
Arrowroot and Corn Flour	7	...	7	...	...	...	...	...	...	......	......
Bacon	5	...	5	...	...	...	...	...	...	......	......
Baking Powder	15	...	15	...	...	...	...	...	...	......	......
Beer	14	...	14	...	...	...	...	...	...	......	......
Beef Dripping	3	...	3	...	...	...	...	...	...	......	......
Bread	20	...	20	...	...	...	...	...	...	......	......
Butter...	94	...	94	...	...	...	...	...	...	......	......
Camphorated Oil	18	2	16	...	...	...	...	...	2	......	......
Castor Oil	11	...	11	...	...	...	...	...	...	......	......
Cheese...	20	6	14	1	...	...	1	4	1	......	2 2 0
Cider	6	...	6	...	...	...	...	...	...	......	......
Cocoa	23	...	23	...	...	...	...	...	...	......	......
Cod Liver Oil	8	...	8	...	...	...	...	...	...	......	......
Coffee	50	...	50	...	...	...	...	...	...	......	......
Confectionery and Mincemeat	123	...	123	...	...	...	...	...	...	......	......
Cream and Preserved Cream...	32	1	31	...	...	...	...	...	1	......	......
Drugs	306	10	296	...	...	...	...	6	4	......	5 15 6
Flour	43	...	43	...	...	...	...	...	...	......	......
Fish (Tinned and Potted)	20	...	20	...	...	...	...	...	...	......	......
Fruit (Tinned)	9	...	9	...	...	...	...	...	...	......	......
Honey...	10	...	10	...	...	...	...	...	...	......	......
Ice Cream	1	...	1	...	...	...	...	...	...	......	......
Infants' Food	10	...	10	...	...	...	...	...	...	......	......
Jams	48	...	48	...	...	...	...	...	...	......	......
Jellies	12	...	12	...	...	...	...	...	...	......	......
Ketchup and Sauces	11	...	11	...	...	...	...	...	...	......	......
Lard	29	...	29	...	...	...	...	...	...	......	......
Margarine	11	...	11	...	...	...	...	...	...	......	......
Meat (Tinned and Prepared)...	59	...	59	...	...	...	...	...	...	......	......
Meat Extract	3	...	3	...	...	...	...	...	...	......	......
Milk	668	144	524	47	29	17	1	22	75	105 0 0	78 15 2
Milk (Condensed and Evaporated) ...	25	...	25	...	...	...	...	...	...	......	......
Mineral Waters, Cordials, etc.	73	9	64	...	...	...	...	8	1	......	4 4 0
Mustard	7	...	7	...	...	...	...	...	...	......	......
Oatmeal	17	...	17	...	...	...	...	...	...	......	......
Olive Oil	8	...	8	...	...	...	...	...	...	......	......
Pearl Barley	3	...	3	...	...	...	...	...	...	......	......
Pepper...	15	...	15	...	...	...	...	...	...	......	......
Pickles...	4	...	4	...	...	...	...	...	...	......	......
Rice, Tapioca, etc.	24	...	24	...	...	...	...	...	...	......	......
Salt	2	1	1	...	...	...	...	...	1	......	......
Shrimps	1	1	...	...	...	...	...	1	...	......	0 10 6
Spices	13	...	13	...	...	...	...	...	...	......	......
Spirits	96	4	92	3	3	...	...	...	1	11 0 0	3 13 6
Sugar	10	...	10	...	...	...	...	...	...	......	......
Tea	38	...	38	...	...	...	...	...	...	......	......
Treacle and Golden Syrup	16	...	16	...	...	...	...	...	...	......	......
Tripe	...	...	...	...	...	...	...	...	...	......	......
Vegetables (Tinned)...	2	...	2	...	...	...	...	...	...	......	......
Vinegar	9	...	9	...	...	...	...	...	...	......	......
Wines	23	...	23	...	...	...	...	...	...	......	......
Totals	2,075	178	1,897	51	32	17	2	41	86	116 0 0	95 0 8

In addition to the above, 323 samples of milk have been procured from farmers' cans by the Sampling Officers for bacteriological examination under the Milk Clauses of the Manchester General Powers Acts.

SMOKE NUISANCES.

For the abatement of smoke nuisances the three Inspectors appointed specially for this work have taken 449 timed observations of half-an-hour each, with the result that 88 notices for the abatement of nuisances have been served. Proceedings before the Magistrates were ordered in 82 cases out of 116 offences reported. The number of offenders cautioned or excused was 34.

The 82 were summoned before the Justices, and in 58 instances fines were imposed amounting to £149.

Nineteen orders of abatement were granted and served, and the costs paid in connection therewith amounted to £7 12s., and 5 cases were dismissed or withdrawn.

Much attention during the past year has been given to the nuisance caused by the emission of black smoke, not only from the furnaces connected with boilers in mills, warehouses, and other works, but also from chemical and other industries, and the efforts made have already resulted in a considerable reduction of the nuisance.

Chimneys of firms in adjoining districts have also been observed in regard to smoke nuisances, and communications sent to the Authorities concerned.

CANAL BOATS ACTS.

The number of canal boats on the register is 420.

The number of inspections made was 1,641.

Caution notices were sent to the owners or masters of 8 boats, and 87 owners or masters were verbally cautioned by the Inspector, all of which have been attended to.

OFFENSIVE TRADES.

The number of offensive trades on the register is 779. These have been placed under close supervision and periodical visits paid.

UNHEALTHY DWELLINGS.

During the year no houses were certified as unfit for human habitation.

MILK AND CREAM REGULATIONS, 1912 AND 1917.

The following is a summary of the action taken under these regulations in 1925:—

1. *Milk and Cream not sold as Preserved Cream.*

	(*a*) Number of samples examined for the presence of a preservative	(*b*) Number in which a preservative was reported to be present
Milk	668	1
Cream	8	1

Nature of preservative in each case in column (*b*) and action taken under the Regulations in regard to it. (See table below.)

Article	No. of Sample	Formal or Informal	Result of Analysis	Action taken
Milk	1668C	Formal	Contained 1·2 parts of Formaldehyde per 100,000 parts of the milk	Magisterial proc ings taken. Fi £2, and C £1 11s. 6d., ur Section 6, Food Drugs Act, 187
Cream... ...	1555C	Informal	Contained 0·36 per cent. of Boric Acid	No action. (Info sample)

2. *Cream sold as Preserved Cream.*

(A) Instances in which samples have been submitted for analysis to ascertain if the statements on the labels as to preservatives were correct:—

(1) Correct statements made 24

(2) Statements incorrect .. ..

Total 24

(B) Determination made of milk fat in cream sold as preserved cream:—

(1) Above 35 per cent. 24

(2) Below 35 per cent. .. ..

Total 24

(C) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V. (1) and the proviso in Article V. (2) of the Regulations have not been observed.

(D) Particulars of each case in which the Regulations have not been complied with and action taken.

Answers to Question 2 (C and D).—None.

3. *Thickening Substances.*—Any evidence of their addition to cream or to preserved cream. Action taken where found.—None.

4. *Other Observations,* if any.—None.

NUMBER OF NOTICES ISSUED FOR ABATEMENT OF NUISANCES UNDER THE VARIOUS LOCAL ACTS AND BYE-LAWS DURING 1925.

Act of Parliament	Work required to be done	No. of Notices Issued
Manchester Police Act, 1844 (Section 86)	Cleanse and limewash houses	60
,, ,, ,,	,, ,, (privies)	15
Manchester Corporation Waterworks and Improvement Act, 1867 (Section 42) and 1869 (Section 34)	Repairs to privies, etc. ..	291
Manchester Corporation Waterworks and Improvement Act, 1869 (Section 29)	Renew defective downspouts and gutters	608
Manchester Corporation Waterworks and Improvement Act, 1869 (Section 31)	Discontinue keeping swine .	1
Manchester New Streets Act, 1853 (Section 41) Manchester Corporation Act, 1891 (Section 38)	Repair or flag surfaces of yards and passages	898
Manchester New Streets Act, 1853 (Section 45)	Discontinue occupying cellars as dwelling-rooms	2
Manchester Improvement Act, 1845 (Section 46)	Open, cleanse, and repair drains	761
Manchester Bye-laws relating to houses let in lodgings	Alterations and general repairs	8
Not issued under any Act of Parliament..	Preliminary notice for general repairs	*2784

NOTE.—The majority of the notices issued have been complied with, including the preliminary notices (marked with an asterisk), and of the latter notices not complied with the worst cases have been referred to the Housing Committee to be dealt with under the Housing Acts.

Bye-Laws *re* Houses Let in Lodgings.

Table showing the Number of Lodging-houses in the City, the Number of Visits to such Houses, and the Number of Cases Reported for Offences against the Bye-Laws during 1925.

Number of Lodging-Houses on the Register	Number of Visits		Total Number of Visits	Number of Offences Reported to Committee	Number ordered to be Summoned	Number Cautioned, Excused, or Reported to other Committees	Minor Offences Cautioned by Inspector
	Day	Night					
2,405	9,549	..	9,549	107	64	43	..

Table showing the Number of Cases in which Magisterial Proceedings were taken and the Result of same.

Description of Offence	Number of Summonses taken Out	Number of Persons Fined with Costs	Number of Persons Ordered to Pay Costs only	Number Adjourned	Number Excused, Dismissed, or Withdrawn	Amount of Fines Imposed	Amount of Costs Ordered to be Paid
						£ s. d.	£ s. d.
Lodging-houses in a dirty state	34	15	8	—	11	4 10 0	2 0 0
Lodging-houses overcrowded	19	13	4	—	2	5 2 6	1 0 0
Mixing of sexes	7	3	2	—	2	1 5 0	0 10 0
Using kitchen and unregistered room as sleeping rooms	2	1	—	—	1	0 2 6	—
Keeping animals so as to render premises unwholesome	1	1	—	—	—	0 10 0	—
Neglecting to furnish particulars of lodging-houses	1	1	—	—	—	0 5 0	—
Totals	64	34	14	—	16	11 15 0	3 10 0

		Ancoats	Central	St. George's	Cheetham	Crumpsall	Blackley	Harpurhey	Moston	Newton	Bradford	Beswick	Clayton	Ardwick	Openshaw	Gorton (West)	Rusholme and Kirkmanshulme	Chorlton-upon-Medlock	Hulme	Moss Side	Withington	Levenshulme	Gorton	TOTALS
Complaints to Sanitary Superintendent		843	593	392	387	165	96	118	127	390	350	98	270	518	454	350	556	583	550	146	494	104	365	7,955
Inspections of	Dwelling-houses	2651	1599	2526	1331	670	546	457	1554	3311	636	1139	1334	1076	1406	1587	1545	1852	4482	3301	891	866	1568	36,328
	Newly-infected Dwelling-houses	580	271	519	431	76	164	178	215	518	177	116	107	561	275	351	433	525	842	196	324	212	558	7.629
	Cellars	...	75	137	...	...	...	...	...	2	...	...	...	...	...	...	...	...	1	...	...	...	...	215
	Schools	4	3	9	2	...	...	1	...	...	3	5	...	1	...	1	6	...	2	1	6	2	5	51
	Factories and Workshops	40	327	96	...	1	3	1	2	107	4	...	...	8	2	21	5	54	11	46	1	...	...	729
	Lodging-houses	1237	1901	3119	700	12	59	42	17	94	84	76	34	396	20	3	50	1322	275	31	28	7	42	9.549
	Offensive Trades	151	194	131	39	..	4	6	44	93	50	14	396	202	10	96	115	68	46	56	53	27	192	1,987
	Dairies and Milkshops	333	422	211	12	71	...	1	52	9	49	66	9	279	10	2	7	232	35	42	201	79	12	2,134
	Ice Cream Manufactories	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bakehouses	151	151	202	231	19	110	129	168	136	66	72	46	140	207	116	198	309	319	191	290	118	211	3,580
	Canal Boats	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,641
	Slaughter-houses	...	2	...	1	...	1	2	...	10	...	...	...	...	...	...	2	...	...	2	...	...	...	20
	Tips for Refuse	...	11	15	99	26	30	29	52	73	...	...	38	33	23	...	24	...	...	...	21	13	35	522
	Miscellaneous Inspections	941	2325	728	281	115	87	86	202	416	69	967	41	1961	329	162	561	851	361	227	1374	189	848	13,121
	Stables, &c.	538	702	171	19	234	13	20	44	203	15	74	107	534	7	21	76	572	141	167	194	88	135	4,075
	Factories and Workshops by Shop Hours, &c., Inspectors	1179	3992	1552	1944	71	181	486	342	643	184	137	116	520	305	278	325	1130	664	353	405	119	242	15.168
	Shops by Shop Hours, &c., Inspectors	1081	1957	773	820	74	226	549	406	831	278	337	158	507	452	410	382	602	824	324	377	254	579	12,201
Infected Rooms Disinfected		2253	640	1030	735	297	228	266	439	892	332	529	229	1262	397	632	500	776	1388	488	743	351	822	15,229
Infected Dwellings Re-inspected		2016	1023	2427	1669	353	536	781	1454	1248	623	330	327	1763	1113	924	877	1538	1793	466	1377	636	1803	25,077
Drains Tested by Water		77	267	46	95	173	112	9	69	47	18	32	1	81	64	24	607	171	41	135	1914	37	121	4,141
Smoke Abatement	Observations made	18	52	22	14	7	25	7	4	57	7	1	43	15	19	30	31	13	24	8	30	5	17	449
	Proceedings before Magistrates	6	10	2	4	...	6	3	2	8	4	1	16	1	4	4	1	...	3	4	...	1	2	82
Food Adulteration	Samples Collected for Analysis	73	482	63	100	23	46	12	12	47	14	3	18	105	66	40	162	229	175	123	126	69	43	*2,033
	Proceedings before Magistrates	2	36	...	1	...	...	...	...	...	...	...	...	...	...	...	3	1	5	...	2	...	2	52
Ashpits reported to Cleansing Department for emptying		...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	3
Receptacles reported to Cleansing Department for emptying		...	1	2	2	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1	1	...	...	9
Notices issued for Abatement of Nuisances.		693	701	807	936	104	130	150	218	533	399	230	174	814	329	404	374	947	1133	390	389	361	531	†10,755
Letters written for Abatement of Nuisances		15	70	28	32	6	2	...	5	6	9	8	3	18	...	3	5	14	34	12	2	6	3	‡281
Reports made to Medical Officer of Health		29	90	21	5	27	1	...	24	280	...	...	10	165	91	2	126	63	12	26	184	37	86	1,279
Legal proceedings taken		6	19	8	10	...	1	...	4	...	2	3	8	3	...	...	2	...	23	...	...	...	1	90
Total Nuisances abated		1013	601	872	744	62	131	153	243	476	471	220	169	798	273	379	454	869	944	348	406	204	462	10.382

* 2 samples procured outside the City. † Includes 8 notices issued for repairs to Canal Boats. ‡ In addition to these there were 589 circular letters sent to owners *re* defective water-closets and ashbins, and 2,278 orders on the Cleansing Department for new ashbins were sent to owners or contractors.

TABLE B.

Annual Report of the Medical Officer of Health for the year 1925, for the County Borough of Manchester, on the administration of the Factory and Workshop Act, 1901, in connection with

FACTORIES, WORKSHOPS, WORKPLACES, AND HOMEWORK.

1.—INSPECTION OF FACTORIES, WORKSHOPS, AND WORKPLACES.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises	Number of		
	Inspections	Written Notices	Prosecutions
Factories (including Factory Laundries) .. Workshops (including Workshop Laundries) .. Workplaces (other than Outworkers' premises included in Part 3 of this Report)	19,477	76	2
Total	19,477	76	2

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS, AND WORKPLACES.

Particulars	Number of Defects			No. of Prosecutions
	Found	Remedied	Referred to H.M. Inspector	
*Nuisances under the Public Health Acts :—**				
Want of cleanliness	294	294	3	..
Want of ventilation	4	4	1	..
Overcrowding	..	..	..	..
Want of drainage of floors	..	..	..	..
Other nuisances	41	40	1	2
Sanitary accommodation—				
Insufficient	17	10	..	..
Unsuitable or defective	96	79	2	..
Not separate for sexes	20	7	..	..
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground bakehouse (S. 101)	..	..	..	..
Other offences (excluding offences relating to outwork and offences under the sections mentioned in the Schedule to the Ministry of Health (Factory and Workshops Transfer of Powers Order, 1921).	143	118	5	..
Total	615	552	12	2

* Including those specified in sections 2, 3, 7, and 8 of the Factory and Workshop Act as remediable under the Public Health Acts.

NOTE.—The Factory and Workshop Act, 1901 (S. 132), requires the Medical Officer of Health in his Annual Report to the District Council to report specifically on the administration of that Act in workshops and workplaces, and to send a copy of his Annual Report, or so much of it as deals with this subject, to the Secretary of State (Home Office). If the Annual Report is presented otherwise than in print, it is unnecessary to include in the copy sent to the Home Office the portions which do not relate to factories, workshops, workplaces, or homework. The duties of Local Authorities and the Medical Officer of Health under the Act of 1901 are detailed in the Home Office Memorandum of December, 1904. A further Memorandum, on the Home Work Provisions of the Factory Act, was issued to all District Councils and Medical Officers of Health in October, 1906.

I append a brief Statement on the Memorandum of the Home Office upon the structural requirements of the Factory and Workshop Acts, as to

1. Means of escape from fire :—

Bye-laws have been in operation since 1908. These have been amended, and in their amended form were approved by the Local Government Board in 1913.

A large amount of work has been done under these bye-laws, and practically the whole of the factories and workshops have been dealt with.

2. Sanitary accommodation :

Although the work has not been carried out under the Sanitary Accommodation Order, 1903, the conditions stated in the Memorandum have been enforced, and all the factories and workshops have been dealt with, although changes are constantly occurring.

CLOSET ACCOMMODATION.

The following table shows the manner in which the conversion was effected from pails and middens in the City to water-closets. This conversion was accompanied by the necessary alterations in house drains, passage drains, paving of passages, and in the houses themselves. These alterations cannot be exhibited in tabular form, at all events so far as drainage and paving is concerned.

RETURN OF PAIL-CLOSETS AND MIDDEN-PRIVIES ALTERED TO WATER-CLOSETS.

	Number of Pail-Closets altered to Water-Closets	Number of Midden-Privies altered to Water-Closets	Number of Slop Water-Closets altered to Water-Closets
From April 1st, 1891, to March 31st, 1892	16	39	—
,, ,, 1892, ,, 1893	98	100	—
,, ,, 1893, ,, 1894	138	141	—
,, ,, 1894, ,, 1895	179	89	—
,, ,, 1895, ,, 1896	185	119	—
,, ,, 1896, ,, 1897	197	284	—
,, ,, 1897, ,, 1898	179	405	—
,, ,, 1898, ,, 1899	136	960	—
,, ,, 1899, ,, 1900	249	897	—
,, ,, 1900, ,, 1901	180	1,327	—
,, ,, 1901, ,, 1902	385	999	—
,, ,, 1902, ,, 1903	976	1,282	—
,, ,, 1903, ,, 1904	1,899	1,379	—
,, ,, 1904, ,, 1905	2,222	1,691	—
,, ,, 1905, ,, 1906	3,297	*2,600	—
,, ,, 1906, ,, 1907	3,746	3,662	—
,, ,, 1907, ,, 1908	1,296	918	—
,, ,, 1908, ,, 1909	10,081	2,844	—
,, ,, 1909, ,, 1910	11,296	1,378	45
,, ,, 1910, ,, 1911	8,552	1,204	217
,, ,, 1911, ,, 1912	6,970	*3,180	121
,, ,, 1912, ,, 1913	4,214	533	153
,, ,, 1913, ,, 1914	1,420	78	14
,, ,, 1914, ,, 1915	428	61	3
,, ,, 1915, ,, 1916	155	14	—
,, ,, 1916, ,, 1917	29	6	—
,, ,, 1917, ,, 1918	3	—	—
,, ,, 1918, ,, 1919	76	13	—
,, ,, 1919, ,, 1920	1	—	—
,, ,, 1920, ,, 1921	2	—	—
,, ,, 1921, ,, 1922	14	—	—
,, ,, 1922, ,, 1923	10	—	—
,, ,, 1923, ,, 1924	56	—	—
,, ,, 1924, ,, 1925	15	—	—
,, ,, 1925, to Dec. 31st, 1925	4	—	—
Total (85,460) ..	58,704	26,203	553

* Extension of City Boundaries

HOUSING PARTICULARS FOR THE CITY OF MANCHESTER.

The figures are summarised below.

The number of houses certified to, and dealt with by, the Housing Sub-Committee, from February, 1885, to December 31st, 1925 :—

	Number Certified and ordered to be Closed *	Number of Houses added together or to other Houses	Number Demolished	Number Repaired and Reopened	Number Closed	Number not Closed	Number which stand Adjourned
Totals.. ..	27,453	3,387	6,987	13,619	1,248	2,111	101

* This work is carried out under a Local Act.

Owing to the prevailing conditions no new cases of " Houses unfit for human abitation " were certified by the Chief Inspector during the year 1925.

The number of conversions from pail-closets and midden-privies to water-losets is given herewith :—

From April 1st, 1903, to March 31st, 1925	75,343
From April 1st, 1903, to December 31st, 1925	75,347
From April 1st, 1924, to March 31st, 1925	15
From April 1st, 1925, to December 31st, 1925	4

The numbers still requiring to be replaced are—middens, 35 ; pail-closets 225. The number of water-closets in Manchester is estimated (at December st, 1925) to be 232,951, of which 182,177 are in houses, and 50,774 are in arehouses, workshops, etc.

Housing Conditions—Year ended 31st December, 1925.

General Statistics.

Number of new houses erected during the year:—

(*a*) Total (including numbers given separately under (*b*)	1,861
(*b*) With State assistance under the Housing Acts—	
(i.) By the Local Authority	800
(ii.) By other bodies or persons	728

1. *Unfit Dwelling-houses.*

Inspection—(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	44,283
(2) Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910, or the Housing Consolidated Regulations, 1925	1,356
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	404
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	559

2. *Remedy of Defects without Service of Formal Notices.*

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	2,585

Note.—In addition to these, 590 letters were sent to owners, requesting that defects at dwelling-houses should be remedied, and practically all were complied with.

General Statistics—continued

3. *Action under Statutory Powers.*

(A) *Proceedings under Section* 3 *of the Housing Act,* 1925.

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	149
(2) Number of dwelling-houses which were rendered fit after service of formal notices—	
(*a*) By owners	142
(*b*) By Local Authority in default of owners	41
(3) Number of dwelling-houses in respect of which closing orders became operative in pursuance of declarations by owners of intention to close	None

(B) *Proceedings under the Public Health Acts.*

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	2,522
(2) Number of dwelling-houses in which defects were remedied after service of formal notices—	
(*a*) By owners	762
(*b*) By Local Authority in default of owners	1,253

(C) *Proceedings under Sections* 11, 14, *and* 15 *of the Housing Act,* 1925.

(1) Number of representations made with a view to the making of closing orders	None
(2) Number of dwelling-houses in respect of which closing orders were made	None
(3) Number of dwelling-houses in respect of which closing orders were determined, the dwelling-houses having been rendered fit	None
(4) Number of dwelling-houses in respect of which demolition orders were made	None
(5) Number of dwelling-houses demolished in pursuance of demolition orders	None

TABLE I.

HOUSING AND TOWN PLANNING ACTS.

TABLE SHOWING THE CLASSIFICATION OF HOUSES INSPECTED IN EACH DISTRICT DURING THE PERIOD FROM JANUARY 1ST, 1925, TO DECEMBER 31ST, 1925.

DISTRICT	Number of Houses Inspected	Number of Rooms							Good	Minor Defects	Serious Defects		Unfit; cannot be remedied	Business Premises
		1	2	3	4	5	6	over 6			Remediable without reconstruction	Irremediable without reconstruction		
Ardwick	357	—	5	20	87	162	42	41	9	50	32	132	134	52
Blackley	54	—	—	1	49	4	—	—	—	7	36	11	—	—
Moston	206	—	—	—	126	73	3	4	3	181	22	—	—	4
Chorlton-on-Medlock .	739	—	28	54	225	246	92	94	—	143	289	37	270	178
TOTALS	1,356	—	33	75	487	485	137	139	12	381	379	180	404	234

TABLE 2.

HOUSING AND TOWN PLANNING ACTS.

GENERAL CHARACTER OF THE HOUSES INSPECTED IN EACH DISTRICT DURING THE PERIOD FROM JANUARY 1ST, 1925, TO DECEMBER 31ST, 1925.

DISTRICT	Lack of Free Ventilation	Deficiency of Light	Drainage	Paving	Want of Cleanliness	Dampness		Closets			Ashplaces		Defects		Overcrowding	
						From Ground	From Roof	W.C.'s	Pails	Privies	Bins	Boxes	Remediable	Irremediable	Over 2 persons per Room	Over 2½ persons per Bedroom
Ardwick	156	58	1	4	25	16	129	356	1	—	357	—	82	260	12	31
Blackley	—	—	—	31	—	11	5	54	—	—	53	1	43	11	1	6
Moston	—	—	—	50	—	1	2	206	—	—	206	—	203	—	—	6
Chorlton-on-Medlock .	249	53	3	313	156	190	503	735	4	—	726	5	432	307	38	113
TOTALS	405	111	4	398	181	218	639	1,351	5	—	1,342	6	760	584	51	156

TABLE 3.

HOUSING AND TOWN PLANNING ACTS.

HOUSES INSPECTED DURING THE YEAR 1925. THIS TABLE IS COMPARABLE WITH FIGURES GIVEN IN THE CENSUS REPORT, 1911.

No. of Rooms per Tenement	No. of Individuals in Private Families or Tenements			No. of Individuals per Room			No. of Children under 10 years per Family or Tenement			Over 2 Individuals per Room		
	Families or Tenements	Population	Individuals per Family or Tenement	Rooms	Population	Individuals per Room	Families or Tenements	Children under 10 years	Children per Family or Tenement	Families or Tenements	Population	Individuals per Room
One	—	—	—	—	—	—	—	—	—	—	—	—
Two	33	95	2·9	66	95	1·4	33	24	0·73	5	28	2·8
Three	75	297	4·0	225	297	1·3	75	60	0·80	6	50	2·8
Four	487	2,090	4·3	19,48	2,090	1·1	487	420	0·86	16	152	2·4
Five	485	2,381	4·9	2,425	2,381	1·0	485	401	0·83	8	90	2·2
Six	137	811	5·9	822	811	1·0	137	147	1·07	4	60	2·5
Seven	75	538	7·2	525	538	1·0	75	90	1·20	2	39	2·8
Over Seven ..	64	643	10·0	—	—	—	64	145	2·26	—	—	—
TOTALS	1,356	6,855	5·0	6,011	6,212	1·03	1,356	1,287	0·95	170	419	2·5

STATEMENT FROM THE MARKETS DEPARTMENT.

At the City Abattoir and Wholesale Meat Market the business has considerably increased during the past 25 years, as is shown in Statement "A" attached.

The bulk of the meat, fish, fruit, etc., which is condemned is found to be unfit for food on arrival at the markets, railway stations, wholesale houses, etc., and by the system which operates of carrying out an efficient inspection at the centre of distribution, the risk of diseased meat, etc., being exposed in retail shops is lessened.

Statement "B" shows the total condemnations in the City, and Statement "C" the total weight of meat condemned at the City Abattoir.

Statement "A."

ANIMALS SLAUGHTERED AT CITY ABATTOIR DURING CERTAIN YEARS.

Year ending 31st March	Cattle	Sheep	Lambs	Calves	Pigs
1900	34,675	106,855	45,595	872	18,163
1910	38,389	193,855	57,553	2,179	10,486
1920	89,143	214,363	48,656	8,202	9,636
1921	44,278	116,407	46,004	6,432	12,747
1922	53,348	232,581	57,159	5,359	19,601
1923	65,138	222,875	97,087	5,631	17,897
1924	55,332	192,906	78,739	3,364	15,662
1925	60,171	252,382	80,474	3,667	19,168

Statement "B."

TOTAL CONDEMNATION OF VARIOUS FOODSTUFFS DURING CERTAIN YEARS.

	1920	1921	1922	1923	1924	1925
	Tons	Tons	Tons	Tons	Tons	Tons
Meat	608	475½	361¾	332½	325¼	406¼
Fish	376¼	195½	195½	133¾	110	83¼
Fruit	80½	79¾	30½	55¼	61¾	85¼
Vegetables	103¾	83½	93¾	82¼	64½	207
Eggs (number)	60,077	44,468	32,828	34,001	29,922	95,368
Game (head)	1,318	245	1,006	78	386	350
Poultry (head)	2,635	3,099	5,769	4,332	6,192	4,870
Rabbits (head)	57,735	64,814	54,319	13,842	19,021	20,611
,, (tinned)	—	720 lbs.	—	—	—	—

Statement "C."

MEAT CONDEMNED AT THE CITY ABATTOIR AND WHOLESALE MEAT MARKET DURING CERTAIN YEARS.

	1920	1921	1922	1923	1924	1925
	Tons	Tons	Tons	Tons	Tons	Tons
Total weight of meat condemned at the City Abattoir and Wholesale Meat Market	586¼	425¾	310½	287¼	293¼	370½
Of which the weight of dressed meat consigned from places other than the City was	218¼	247¾	154¾	139½	168¾	171¾
Included in which were Imported Offals amounting to	10¼	6¼	7½	8¾	2½	2¾

AMOUNT OF UNWHOLESOME FOOD CONDEMNED DURING THE YEAR ENDING 31ST MARCH, 1925.

	1924–25	1923–24
MEAT :—	LBS.	LBS.
Beef	769,266	585,258
Mutton	36,177	21,097
Veal	16,559	13,941
Venison	48	449
Pork	82,151	102,124
Imported Offal	5,927	5,747
	910,128 = 406¼ tons	728,616 = 325¼ tons
FISH :—		
Fish	153,220	209,652
Shellfish	33,544	36,723
	186,764 = 83¼ tons	246,375 = 110 tons
	HEAD	HEAD
GAME	350	386
POULTRY	4,870	6,192
RABBITS	20,611	19,021
	LBS.	LBS.
FRUIT	191,265 = 85¼ tons	138,328 = 61¾ tons
VEGETABLES	464,024 = 207 tons	144,845 = 64½ tons
MISCELLANEOUS :—	NO.	NO.
Eggs	95,368	29,922
	LBS.	LBS.
Condensed Milk	541	6,261
Sundry Provisions	589	9,176

With the exception of the following, which were seized while deposited or exposed for sale, the above quantities were surrendered after being condemned by the Inspectors of the Department:—

	1924-25	1923-24
	LBS.	LBS.
Meat	234	454½
Fish	—	27
		HEAD
Fowl	—	3
		NO.
Eggs	—	25

NOTE.—The term "surrendered" includes cases in which the Inspectors have discovered the diseased meat, etc., in the course of their duty, but in which, owing to salesman's acceptance of the Inspector's decision, it has been deemed unnecessary to obtain a magistrate's order prior to destruction.

PARTICULARS RELATING TO THE OPERATIONS OF THE CLEANSING DEPARTMENT.

The Medical Officer of Health is indebted to Mr. Williamson, Superintendent of the Cleansing Department, for the following particulars relating to the operations of the Cleansing Department during the year ending 31st March, 1925.

Cleansing Department,
Town Hall, Manchester.

Dear Sir,

The administration of the Cleansing Department of the City of Manchester is under the supervision of a Superintendent, with a staff of about 74 officials and about 1,993 workmen.

The extent of the Department's operations may be gathered from the following general statistics :—

The gross expenditure of the Department during the year ended March 31st, 1925, was £416,425, and the gross income £104,462, the net cost being £311,963.

The wages of the Department for the year amounted to £291,171, including bonus.

For Departmental purposes the Cleansing of the City is divided into a Nightsoil Section and a Scavenging Section.

The work of the Nightsoil Section includes the emptying of old privies and pail closets and the collection and disposal of household refuse ; whilst the Scavenging Section deals principally with the cleansing of the streets and disposal of refuse collected therefrom.

Nightsoil Section.

There are within the City 162,574 dwelling-houses, 4,511 lock-up shops, 3,806 factories, and 4,004 workshops. From these premises during the past year there were collected and disposed of 192,402 tons of ashes, 5,964 tons of nightsoil and pail contents, 23,051 tons of warehouse and trade refuse, 4,094 tons of slaughter-house refuse, 3,470 tons of stable manure, and 501 tons of fish refuse.

Previous to 1872 the midden-privy system was in operation, but the Corporation then decided upon the introduction of what is known as the pail-closet system, the scarcity of water preventing the adopting of the water-carriage method. Since the water difficulty has been solved, the conversion of pail-closets into water-closets has been proceeded with, and is rapidly nearing completion. There are now only 217 privies and 1,229 pail-closets within the City.

In later years it was decided to replace the wooden ash-boxes by galvanized iron receptacles with lids, and there are now 171,184 of the latter ; the number of wooden ash-boxes being reduced to 940.

TABLE SHOWING NUMBERS OF PRIVIES, PAILS, ASH-BOXES, AND ASH-BINS FOR PERIOD 1911-1925.

Year	No. of Privies (with Ashpits)	No. of Pails	No. of Wooden Ash-boxes	No. of Galvanized Iron Ash-bins with Lids
1911	5,218	15,624	56,494	74,494
1912	1,982	10,000	50,421	88,762
1913	292	3,850	41,645	101,239
1914	218	2,128	31,875	112,843
1915	157	1,710	24,677	121,191
1916*	236	1,671	16,653	142,107
1917	230	1,665	12,469	146,246
1918	230	1,633	11,230	147,616
1919	217	1,327	8,011	151,609
1920	217	1,326	4,827	153,962
1921	217	1,322	2,181	156,587
1922	217	1,310	1,681	160,347
1923	217	1,300	1,440	165,165
1924	217	1,244	1,140	168,905
1925	217	1,229	940	171,184

* District of Withington incorporated.

The removal of domestic refuse takes place once a week.

The fleet of barges for removal of refuse is now 13.

Six motor and 57 horse-sweeping machines are employed on the streets, a total of 108,107 tons of sweepings, litter, etc., being collected as compared with 106,865 tons in 1924.

The receipts from mortar mills in 1924–1925 was £4,715, compared with £4,353 in the previous year.

General.

The total weight of material dealt with by the Nightsoil and Scavenging Sections of the Department during the year was 346,940 tons, being equal to over 1,000 tons per working day.

TABLE SHOWING THE DISPOSAL OF MATERIAL COLLECTED TWELVE MONTHS ENDING MARCH, 1925.

	Tons	Tons
Town's Refuse to Department's Estates	9,125	
,, ,, Farmers	3,404	
,, ,, (Pail contents) to Farmers	643	
		13,172
Garbage to Department's Estates	2,882	
Stable Manure to Department's Estates	3,060	
,, Farmers	50	
		5,992
Clinkers to Department's Estates	4,995	
,, ,, Contractors	2,546	
,, ,, Allotments	106	
,, and Rubbish to Tip	47,368	
		55,015
Sweepings to Estates	18,202	
,, ,, Farmers	1,408	
,, (rough) to Tips	57,705	
,, to Allotments	1,408	
		78,723
Rubbish (Ash-box Refuse) to Estates		36,866
Market Garbage to Farmers' Carts		30
Concentrated Manure		296
Sand on Streets		2,836
Stone Clippings on Wood Pavements		1,204
Mortar		7,770
Old Irons and Tins, Glass, Soap, Grease, and Waste Paper		1,288
Burning and Drainage		144,684
Total		347,876

The amount of refuse taken to the Carrington and Chat Moss Estates since they were purchased by the Corporation is as follows:—

Chat Moss Estate	1,384,309 tons	in 27	years.
Carrington ,, ...	1,071,610 ,,	37	,,

The number of farm tenants on these estates is 54, occupying 51 farmsteads and 3 extensive nurseries.

The Corporation erected the farmsteads, together with an adequate supply of town's water. There are 2 railway sidings on the estate and 2 wharves on the Ship Canal. The market value of the estates has considerably increased since their purchase, chiefly through cultivation and owing to the proximity of the Manchester Ship Canal.

Statement as to Work done during Five Years ending 1921 to 1925.

No. of wet and dry middens abolished		35
,, pail closets abolished		97
,, wooden ashboxes abolished		3,887
,, ashbins increased		17,222
,, water-closets added—Dwelling-houses	11,722	
Warehouses	7,276	
		18,998
,, miles of streets added		36
Additional street surface swept		5,559,226 sq. yds.
Barrels of water put on streets during last 5 years		144,110
No. of men additionally employed		200
Tons of refuse collected and disposed of (domestic and sweepings) 1925	346,940	
1920	295,852	
Increase		51,088 tons

Mechanical Vehicles added since 1921.

Three large mechanical sweepers and collectors of street sweepings.

The following vehicles have been bought, and have replaced horse-driven appliances:—

- 6 3-wheel Lacre sweeping machines.
- 3 "Commer" type motor tipper lorries carrying 3—4 tons.
- 6 ambulances (under the direction of the M.O.H.) for conveyance of infectious patients. Three of these are replacements, and have been purchased since 1921.
- 2 bedding vans.

	1921	1925
Patients removed to hospital	3,807	4,176
Articles stoved or burnt	46,792	49,664
Rooms stripped of wallpaper	10,949	8,508

	1922	1925
Children bathed and clothes stoved	5,467	40
Articles and books stoved by formalin	?	5,448

Alterations have been made at the Gorton Destructor Works, 5 Galloway boilers being substituted for destructor furnaces, with a view to supplying the houses on the Gorton Mount Estate with hot water.

The boilers are fed with town's refuse entirely.

R. Williamson,
Superintendent.

Date	Blankets	Sheets	Pillows	Bolsters	Quilts	Mattresses	Beds	Carpets	Articles of Clothing	Sundry Articles	Total
1925 April	490	228	688	225	426	222	340	229	797	410	4,055
May	916	266	687	231	453	176	371	125	649	1,831	5,705
June	1,388	253	725	206	417	188	354	489	644	245	4,909
July	514	317	722	256	433	255	429	175	925	2,204	6,230
August ...	603	391	732	224	427	261	523	133	716	336	4,336
September ...	1,019	288	737	247	453	260	389	227	707	399	4,726
October	1,338	388	950	305	593	552	471	148	1,079	149	5,973
November ...	635	277	732	221	497	253	389,	200	775	540	4,519
December ...	656	258	665	209	471	219	338	35	651	662	4,124
1926 January ...	579	229	615	176	295	212	280	46	459	171	3,062
February ...	1,575	300	572	229	325	172	273	20	593	129	4,188
March	728	268	661	213	411	256	316	39	526	420	3,838
Totals	10,441	3,453	8,486	2,742	5,201	3,026	4,473	1,866	8,521	7,456	55,665

Summary.—Large Steam Disinfector ... ... 50,117 articles.
Formic Aldehyde Chamber ... ... 4,876 ,, (500 mattresses, 4,376 clothing).
,, ,, ... 672 books.

55,665

VETERINARY AND MILK CONTROL DEPARTMENT.

By Lieut.-Col. J. W. Brittlebank, C.M.G., M.R.C.V.S., D.V.S.M. (Vict.),
Chief Veterinary Officer.

The work for the year 1925 is briefly summarised in the attached tables.

The measures taken to detect tuberculous infection in the general milk supply again show a high percentage of tuberculous milk in the country farms. The milk supply of 292 farms situated outside Manchester, when submitted to examination, show that 24, or 8·2 per cent., were tuberculous. These figures, while showing a gratifying drop from the previous year and a drop of over 6 per cent. from the peak year, 1920, still indicate a very high degree of infection in the country milk. The number of country farms dealt with is rather less than that of the previous year, but this, as referred to later in my report, was due partly to limitations of staff, and to a general scheme of re-organisation which was carried out throughout the department. It would be perhaps unfair to say that the percentage quoted is representative of the whole milk supply, as, owing to the difficulties then existing, it was only possible for a limited supervision to be exercised, and this was exercised against sources which were known, from past experience, to probably yield the highest proportion of infection.

The Tuberculosis Order came into force on the 1st September, 1925, and provides the elimination from herds of (1) cows suffering from tuberculosis of the udder; (2) cows suffering from tuberculous emaciaton (3); cows suffering from chronic cough of tuberculous origin. It is too early yet to forecast the effect which this order may have upon our general milk supply, but it is reasonable to presume that if the order is administrated in its entirety it cannot fail to remove many animals from the milking herds which are not only dangerous to their fellows as sources of infection, but are also sources of danger from infected milk.

I think it is correct to presume that the general propaganda which is being pursued not only by the Public Health Authorities, but also, it is gratifying to know, by the Farmers' Union, is commencing to have effect in cleaning up some of the dirty milk in general circulation. There can be no question that there is, generally speaking, amongst farmers, a much more intelligent appreciation of what is required to procure milk from their cows in a reasonable state of cleanliness. It is too early yet to attempt to record the extent of such improvement or whether it is likely, where it has taken place, to be permanent. It is, however, safe to say that until we get the general adoption of steam sterilisation, either by the improvement of existing conveniences or by the installation of proper steam producing plant, any such improvement as may have taken place will have but little permanent effect on the general results.

When we turn to the work done within the City we may, I think, approach it with greater optimism, for there can be no doubt that there has been a marked and steady improvement throughout the entire distribution of milk.

It is not possible to get great reforms carried out at once. The interests concerned are many and varied, the human element varying quite as much as the conditions which surround them, but I am satisfied that the general conditions under which milk is collected, stored, and distributed are no longer comparable with pre-existing conditions. All the large firms, and indeed some of the smaller ones, have installed the necessary machinery for the pasteurisation of milk, and at least half the milk distributed in Manchester is now rendered safe for the consumer. In many quarters objections have been expressed, and many of these objections I think are little more than unfounded prejudices to the use of pasteurised milk. I am of opinion that there is little ground for these objections or prejudices. Scientific research has shown that there is little change in the essential food constituents of milk treated by low temperature pasteurisation, but there is a great gain for the community to know that milk so treated is free from any active bacteria, such as the tubercle bacillus, and may be used without the slightest fear of infection.

The distribution of milk in bottles is growing steadily, but it cannot be too repeatedly urged upon consumers of milk that they should only purchase such ottled milk from distributors who are in possession of proper sterilising pparatus for the efficient cleaning of bottles. There are many who, in order to try and catch trade, distribute small quantities of milk in bottles, and are ot in possession of the necessary plant for rendering them properly sterile or the reception of milk. It is hoped, however, that under the Milk Orders romised to be made under the 1915 Milk and Dairies (Consolidation) Act, hat the necessary powers will be given to deal efficiently with these dairymen n our administration as applied to the supervision of milk distribution.

The distribution of graded milks makes little headway. Certified milk has very limited sale in the city, and there can be little doubt that so long as the rice of this milk remains as high as it is, there will be but little increase in he demand, as it is really outside the purchasing power of any but the well-o-do. I had hoped that there would have been a considerable increase in the emand for Grade A milk but so far this is not so, and there can be no doubt at the public but little understand the various designations applied to milk ld under licences granted under the Milk (Special Designations) Order.

The supervision of the general manufacture and distribution of ice-cream has been carried out with all the vigour and thoroughness found possible by the staff, which up to the end of October was only of a temporary nature, and was often taken away to perform other special duties for various sections of the Public Health Department. I am satisfied that much remains to be done in this direction, for the manufacture of ice-cream can only be satisfactory when carried out in properly equipped premises, with all the necessary modern conveniences for efficient sterilisation and cleanliness. The manufacture of so important an article of food cannot be satisfactory when carried on, as it frequently is, in small, ill-equipped, and overcrowded houses, however great the human effort to keep such premises clean may be. I am glad to note, largely in consequence of representations made, that a movement in the direction required has already commenced, and some excellently designed and equipped factories have been erected or are in process of construction.

I am glad to record the fact that my section of the department is now satisfactorily equipped. An Assistant Veterinary Officer has been appointed, and also three milk Inspectors, whose work will entirely lie in the direction of the improvement of the milk supply.

The number of inquiries made by the general public in the department increases every year, and is an encouraging indication of a growing interest in the whole question.

I am glad once again to record my indebtedness to the assistance receive from the Committee of the Manchester and Salford Milk Dealers' Association and more particularly their Secretary, Mr. Shenton. The various branche of the Farmers' Union have also been of great assistance, and in this particula I place on special record the services of Mr. Garner, the Secretary of the Cheshir branch of the Union, and finally the work done by the Cheshire School o Agriculture at Prees Heath, under the able direction of its Principal, Mr. Merce The clean milk demonstrations carried out by the staff of this institut throughout the county cannot fail to be of the greatest possible value. Th clean milk competition carried out under their supervision was a fine piec of work and well done. The Lancashire Milk Recording Society too, are doin excellent work. I had the honour of acting as one of their judges in their annu competition, and was much impressed with all I saw at the various farms visited.

Finally I must express my indebtedness to all my staff for the way in whic they have supported me throughout the year. It is perhaps unfair individualise, but I am specially grateful to my Chief Clerk, Mr. Heaton.

MANCHESTER MILK CLAUSES.

TABLE I.

City Farms.	1925
Total number of farms in City	75
Number of visits paid to City farms by Veterinary Surgeon.	206
,, cowsheds inspected	454
,, cows examined	4,289
,, cows found with tuberculous udders	—
Country Farms.	
Number of visits paid to country farms by Veterinary Surgeon	178
,, cowsheds inspected	441
,, cows examined	5,129
,, cows found with tuberculous udders	8
Number of samples taken from farms by Veterinary officers	21
,, positive results of examination of farm samples.	18
,, cows slaughtered under supervision of Veterinary Surgeon	14

TABLE II.

MILK SAMPLES.

	1925
Total number of samples taken by Inspectors for bacteriological examination	820
Collected by Food and Drugs Inspectors at :—	
(*a*) Railway Stations	320
(*b*) Vehicles entering the City by road	23
Collected by Milk shops Inspectors at :—	
(*a*) Day Nurseries and Hospitals	93
(*b*) City Dairies and Railway Stations	384
Number of samples found to cause tuberculosis	*28

* This figure includes 7 control samples.

TABLE II.—continued

MILK SAMPLES—continued

County	No. of Farmers represented by Samples of Milk	No. of Farmers sending Tuberculous Milk	Percentage
Cheshire	150	15	10·00
Derbyshire	59	7	11·86
Lancashire	35	—	—
Staffordshire	46	2	4·34
Yorkshire	2	—	—
Total	292	24	8·21

TABLE III.

ICE CREAM.

	1925
Number of persons on register—December 31st	538
,, visits by Inspectors	45
,, applications for permission to manufacture	25
,, premises	—
,, premises in disrepair	2
,, applications to manufacture ice cream refused	22
,, persons warned for dirty utensils	5

TABLE IV.

MILK AND DAIRIES (AMENDMENT) ACT, 1922.

	1925
Number of registered milkshops—December 31st	2,134
,, visits to milkshops by Inspectors (including District Inspectors)	4,706
Total number of applications for registration	297
Number of applications approved by Committee	159
,, applications refused by Committee	106
,, applications withdrawn before consideration by Committee	32
,, persons found selling milk unregistered	54
,, milkshops found without indicator over door	46
,, milk vessels uncovered	32
,, milkshops found dirty	88
,, premises in disrepair	9

TABLE V.

MILK (SPECIAL DESIGNATIONS) ORDER, 1923.

Number of Licences issued during the year 1925.

	1925
Producer's licence to use the designation "Grade A"	1
Dealer's licence to use the designation "Certified"	2
Dealer's licence to sell milk as "Grade A"	1
Dealer's licence to use the designation "Pasteurised"—	
(*a*) Pasteurising establishments	8
(*b*) Shops	1

The table completed to date from 1901 is inserted.

TABLE VI.

YEAR	Number of Farmers' Milk tested during the year	Total number found to cause Tuberculosis in the experimental animal	Percentage of Farmers sending Tuberculous Milk	Percentage of Farmers from EACH COUNTY whose Milk was found to cause Tuberculosis						
				Cheshire	Derbyshire	Staffordshire	Shropshire	Lancashire	Yorkshire	Manchester
1901	272	27	9·90	10·46	9·23	8·00	10·00	...	...	...
1902	345	36	10·40	12·72	8·65	4·01	...	8·31	...	...
1903	329	45	13·60	14·76	9·58	15·15	40·00	...	...	...
1904	318	29	9·10	11·17	6·02	...	...	7·14	25·00	...
1905	565	47	8·30	10·26	6·00	6·38	...	2·98	12·50	...
1906	542	42	7·70	8·60	6·50	9·30	12·50	4·00	...	...
1907	562	38	6·76	7·71	4·48	6·94	12·50	3·70	...	...
1908	289	27	9·34	11·56	6·25	7·70	...	2·94	12·50	...
1909	535	31	5·79	4·80	7·47	8·57	11·11	3·33	...	...
1910	468	30	6·41	6·20	8·69	5·55	...	...	...	...
1911	494	51	10·32	11·11	2·5	12·12	10·00	12·20	50·00	...
1912	484	54	11·15	12·94	4·00	10·20	33·33	6·00	10·00	...
1913	486	60	12·51	13·99	11·58	9·26	33·33	5·88	20·00	...
1914	352	34	9·66	12·39	8·19	...	...	2·77	...	...
1915	69	9	13·04	16·21	...	...	...	13·63	...	...
1916	321	38	11·83	11·59	8·80	13·04	...	6·97	...	...
1917	365	37	10·13	13·54	9·3	4·3	...	11·7	...	11·4
1918	288	18	6·25	8·17	5·12	4·16	...	3·57	...	2 6
1919	240	20	8·30	8·84	8·0	4·55	...	8·1	...	11·1
1920	194	29	14·94	18·75	10·71	...	...	5·88	...	...
1921	305	37	12·13	16·23	4·17	...	...	10·52	...	...
1922	243	21	8·64	10·52	6·34	6·66	...	3·57	...	...
1923	296	33	11·14	12·94	7·14	10·34	...	9·75	...	...
1924	453	43	9·49	10·80	8·69	8·82	...	5·12	...	...
1925	292	24	8·21	10·00	11·86	4·34	...	...	...	...
Total..	9107	860	9·44	—	—	—	—	—	—	—

TABLE VII.

SOURCE OF SAMPLES			NUMBER OF SAMPLES				Number of Farms Inspected	Number of Cows Examined	COWS WITH TUBERCULOUS UDDERS		
			Primary and Subsequent	Control	Total	Positive Results			Found	Slaughtered under Supervision of a Vet. Surgeon	Removed from Farm
By Food and Drug Inspectors	Primary	Railway Stations	300	20	320	*28	..	..	..	..	..
		Carts and City Dairies ..	21	2	23	..	..	..	..	..	..
By Milkshops Inspectors	Primary	Nurseries and Hospitals (Mixed)	93	..	93	..	..	..	..	..	..
		Carts, City Farms, City Dairies, and Railway Stations	384	..	384	..	..	..	..	..	..
By Veterinary Officers	Primary	Country Farms, Individual	21	..	21	18	178	5,129	..	..	..
		City Farms, Individual ..	..	..	..	..	206	4,289	..	..	..
Totals			819	22	841	46	384	9,418	..	..	..

* Includes 7 control samples found positive.

SPECIAL REPORTS

BY THE

MEDICAL OFFICER OF HEALTH

TO THE

PUBLIC HEALTH COMMITTEE

DURING 1925.

DISINFECTION.

Towards the end of last year Dr. McClure, at my request, prepared a report on the practice in Manchester of disinfection after infectious disease, and attached to this report I append copy of Dr. McClure's report, as it gives the facts of the present practice fully.

I have gone carefully into the existing practice in disinfection here, and am satisfied that as at present carried out it is efficient in so far as disinfection is concerned, but highly inefficient in so far as the business conduct of the department goes. . The disinfecting men push their materials in hand-barrows from the Oldham Road Depot to the house where disinfection has to be done, so that a vast proportion of their time is occupied on the streets; furthermore, the actual process of disinfection is out of date, extremely slow, and is carried out too extensively as a general rule.

It is generally recognised now that the conveyance of infection by articles of personal and domestic use as distinct from contact with the patient, or a "carrier," is not very likely to occur, and there is no doubt but that the amount of disinfection which has, as a rule, been practised is in excess of what is needed. In various parts of the country great reduction of disinfection has been made without any lessening of the efficiency of the control of infectious disease. The Medical Officer of Health, therefore, proposes to reduce the average disinfection practically to the personal clothing of the individual and the one room in which the individual is ill. Individual cases will, of course, require individual measures, but this will be dealt with as the circumstances demand.

The reorganisation of the work of the district sanitary inspector makes it, in my opinion, easily possible for these men to do all the house disinfection required in the City. At present the district inspectors pay four visits for various purposes to each case—one visit to each case on four successive days. I am reducing the number of these visits to two, without in any way impairing the control of infections. I also to propose to abolish the existing method of disinfection—viz., washing over the furniture, walls, floors, etc., with a disinfecting fluid and cleansing the walls by rubbing them down with dough—and substituting for that disinfection by formalin vapour. The whole necessary process can be carried out for any individual room in ten minutes, the room being left shut up for the requisite period. A leaflet will be left with the householder, and the inspector will also advise the householder as to when the room is to be opened. The cleaning of the house is the duty of the occupier and will be left to him. A specimen of the lamp to be used—which is small enough to be carried in the pocket—will be placed on the Committee table.

It is proposed, therefore, to do away with the existing disinfecting staff entirely, with the exception of the vanmen, who will be required to remove bedding and personal clothing for disinfection by steam.

The procedure proposed, therefore, in future will be—

(1) District inspector visits on date of notification and arranges for removal if desired—case removed that day.

(2) Vanmen from Disinfection Station remove bedding and personal clothing for steam disinfection, and the district inspector visits the house and disinfects by formalin lamp.

(3) Vanmen return disinfected bedding and clothing.

Based upon the figures which appear in Dr. McClure's report, the only special expenditure involved in the disinfection of rooms will be the cost of the formalin lamps. The most recent quotation for these is about 10d. each when large quantities are obtained.

The cost of disinfection of premises varies in different years, according to the incidence of disease. The saving on the basis of 1922 work would have been £7,252, and the proportionate saving will be the same in any given year, although the actual amount will vary according to the amount of work required.

The Committee is requested to approve the steps proposed, and to refer this report to the Public Health Committee for its general approval in conjunction with the scheme for the reorganisation of the work of the Sanitary Inspectors' Department.

Further Note.

In connection with the work of disinfection in the City there are two other matters which will require reconsideration, and very probably alteration—

(1) The arrangements for the removal and return of bedding and personal clothing at present done by horse conveyance. It may be that motor traction will be more economical. The Medical Officer of Health proposes to go into this and report at a later date.

(2) The disinfectors at Oldham Road are in a state of great disrepair, and the question of the provision of new disinfecting apparatus will have to be considered before long.

REPORT OF DR. W. ST. C. MCCLURE UPON DISINFECTION IN MANCHESTER.

Disinfection in Manchester is done by the staff of the Cleansing Department, and the cost is charged to the account of the Public Health Committee.

The present methods of disinfection consist in—

(1) Disinfection of clothing and bedding by current steam, or, in some cases, by formalin vapour or by chlorine vapour.

(2) Disinfection of premises by washing with a 2 per cent. solution of chlorinated lime. Formerly the wall paper was always stripped, but this practice is now exceptional. Occasionally the walls are doughed instead of washed.

The Cost.

In 1922 the following information was obtained as to the cost of ambulance and disinfection work in several large towns:—

	£		
Manchester	15,934	Population	744,000
Birmingham	5,977	„	920,000
Liverpool	21,853	„	808,000
Leeds	5,780	„	458,000
Salford	3,900	„	234,000

The expenditure in Manchester appears excessive, except as compared with Liverpool, where the high expense is determined no doubt by the large amount of work required for the Port.

Of the £15,934 paid to the Cleansing Committee in Manchester, £4,394 was for ambulance work and £11,540 for disinfection. It is in the latter respect that expenditure in Manchester is excessive compared with that in other towns.

Cost of Disinfection in Manchester in the Years ending March, 1922 *and* 1923.

	1922	1923
Disinfection of Premises—	£	£
Infectious diseases	5,197	3,338
Tuberculosis	2,363	2,025
Total	£7,560	£5,363
Removal, Disinfection, and Return of Bedding, etc.—	£	£
Infectious diseases	3,628	3,098
Tuberculosis	350	302
Total	£3,978	£3,400
Total	1922 £11,538;	1923 £8,763

The cost of disinfection is largely dependent on two factors:—

(1) The number of houses and the amount of material requiring disinfection.

(2) The amount of disinfection carried out in individual houses.

Both factors are variable according to the prevalence of infectious disease, and the policy pursued in regard to disinfection.

It is the custom in this City to disinfect certain portions of the house and the bedding and clothing of the patient after the occurrence of any of the notifiable diseases except measles and chickenpox.

The amount of disinfection done in each house is determined by the district inspector.

Number of Houses Disinfected by the Corporation Staff during 1922.

	Infectious Disease	Tuberculosis	Total
First quarter	1,690	405	2,095
Second quarter	1,104	433	1,537
Third quarter..	900	500	1,400
Fourth quarter	985	453	1,438
Total..	4,679	1,791	6,470

The year 1922 may be taken as a fairly average year as regards the prevalence of infectious disease.

Analysis of Cost.

The Cleansing Committee charge 2s. 3d. for disinfecting each average-sized room, and 10d. for each "half room." By the term "half room" is meant one or other of the following:—A scullery, a lobby, a bathroom, a landing, a staircase, a closet.

There is also an additional charge ranging from 4d. to 1s. whenever furniture is required to be wiped over with disinfectant. This requirement is fairly general. An additional charge is also made foi stripping, which is now only occasionally called for.

In order to give some indication of the extent of the disinfection done in houses at the present time, 700 consecutive cases have been analysed, and the result is given here in tabular form. In calculating the cost for the purpose of this table, additional charges for stripping and for furniture have not been taken into account.

Analysis of 700 Consecutive Cases of Infectious Disease, excluding Tuberculosis, in 1923, showing extent to which Houses are Disinfected.

Rooms Disinfected in a House	Number of Instances	Cost per House		Total Cost		
		s.	d.	£	s.	d.
1 room..	5	2	3	0	11	3
1 and one half	71	3	1	10	18	11
1 ,, two halves	85	3	11	16	12	11
1 ,, three ,, ...	43	4	9	11	16	3
1 ,, four ,, ...	94	5	7	26	4	10
1 ,, five ,, ...	51	6	5	16	7	3
2 and one half	30	5	4	8	0	0
2 ,, two halves	55	6	2	16	19	2
2 ,, three halves	63	7	0	22	1	0
2 ,, four ,, ...	34	7	10	13	6	4
2 ,, five ,, ...	44	8	8	19	1	4
3 and one half	4	7	7	1	10	4
3 ,, two halves	29	8	5	12	4	1
3 ,, three ,, ...	22	9	3	10	3	6
3 ,, four ,, ...	13	10	1	6	11	1
3 ,, five ,, ...	6	10	11	3	5	6
4 and one half	Nil	—		—		
4 ,, two halves	33	10	8	17	12	0
4 ,, three ,, ...	3	11	6	1	14	6
4 ,, four ,, ...	8	12	4	4	18	8
4 ,, five ,, ...	7	13	2	4	12	2
Total	700			£224	9	1

Average cost per house, 6s. 5d.

The table shows that disinfection of houses is carried out on an extensive scale, and this policy is largely responsible for the high amount spent annually for the purpose.

Each batch of 100 cases gave approximately similar results on analysis, and the facts set out may be taken as representative of the whole series during the year.

If in each house one room only had been disinfected, the cost of disinfecting the 700 houses would have been £79 instead of £224, a saving of £145, or about 65 per cent. on the actual cost.

The average annual cost of disinfecting premises after infectious disease other than tuberculosis for the last three years was £4,384, and a saving of 65 per cent. upon this sum would amount to some £2,800 annually.

Any other variation, according to the extent of disinfection considered necessary, may be worked out on similar lines.

Disinfecting Staff.

The staff employed at Oldham Road Depot in connection with ambulance and disinfection work is given below. The whole of the City is cared for by this staff, except Withington. In the Withington area, all bedding and clothing is taken to Oldham Road, but the disinfection of premises is carried out by the district Cleansing Manager, who employs men for the purpose according to the need. Usually two men are kept employed.

Staff at Oldham Road.

Ambulance officers	8
Motor mechanic	1
Mechanics' labourers	2
Motor washers	2
Bedding van assistants	2
Disinfection oven attendant	1
Telephone attendants	1
Disinfectors	21
Manager Three clerks One messenger	Part time only

With the exception of the disinfectors, the oven attendant, and the two edding van assistants, all the employees mentioned divide their time between mbulance and disinfection work.

The number of disinfectors varies. In 1922 there were 35. At the present ime there are 21, of whom 10 are permanent and 11 temporary. They are aid for work done, and those of the 10 permanent employees who have nsufficient disinfecting work to fill their time are given other work to do, hich is paid for by the Cleansing Committee.

The number of disinfectors required depends upon the amount of disinfection to be done and upon the organisation of their work, means of transport, etc.

The number employed in certain other towns in 1922 was :—

Birmingham	5
Liverpool	12
Leeds	8
Salford	4

Procedure in the Public Health Office.

1. The district inspector fills a form of instruction as to what disinfection is required.

2. These forms are handed into the General Office at 4 p.m. each day.

3. The instructions are telephoned to Oldham Road Depot before 5 p.m. for the work to be done next day.

4. The district inspector supervises the disinfection, and when it is completed satisfactorily signs a form, which is filed in the office.

5. Subsequently a "slip" is received from the Cleansing Department for each case stating what disinfection has been done. This form, if accepted as correct, is signed by the Inspector and returned to the Cleansing Department.

6. A record of all disinfections is kept in the General Office.

Procedure at Oldham Road Depot.

The hours of the disinfectors are from 7-30 a.m. to 5-0 p.m.

At 7-30 each morning so many men are told off by the Manager to carr out the disinfection work for the day. The men are given a list of premise and the necessary instructions, and they themselves determine who amongs them shall disinfect the several premises and in what combination they wil work. As a rule two men are engaged at the same time on any one house sometimes only one, and sometimes three or four, or more if the wor demands it.

The men proceed to the house *on foot.* Each carries in a sack a bucket, brush with a long handle, a gallon jar of solution, and an overall contained i a tin box. When one house is completed the men go on to another if tim permits, and at the end of the day they return to Oldham Road and recor what they have done.

When a house requires to be stripped the men take with them a handca for the purpose of carrying back to the Depot the stripped paper. If the is a destructor near to the house, the handcart is dispensed with and the pap is taken to the destructor in a sack. The handcarts, of which there are 1 are of large size and require two men to draw them.

It is seldom that the same men do more than two houses in a day. The average time taken for each house is just *under 3½ hours.*

As far as possible the work is arranged so that the same men do not deal on the same day with houses infected with different diseases; but this arrangement is not always practicable.

Bedding and Clothing.

It is the practice in every case to disinfect the bedding and clothing of the patient. This is carried out at the Oldham Road Depot.

The number of articles dealt with during the year ending March 31st, 1923, was as follows:—

Number of articles disinfected by steam	52,882
„ „ burnt	703
„ „ through formalin chamber	2,562
Total	55,147

The list of articles collected is checked and signed by the householder on removal and return.

The bedding, etc., is collected and returned by a motor bedding van. There are three vans, two of which are in good order, and one which is poor, and not in use at present. The vans are driven by ambulance officers, and each is accompanied by a bedding van assistant. Before delivering the clean goods the vans are disinfected by formalin spray.

The whole of Manchester for the purpose of this work is divided into two areas, North and South. The North area is worked by one van, one journey being made to deliver disinfected bedding and another to collect contaminated material. The South area necessitates two journeys each day for collection purposes. In the North area disinfected bedding is returned each morning, and in the South area each afternoon. In both areas the bedding and clothing s away from the house for one night.

Cleansing of Verminous Persons.

During the year ending March 31st, 1923, 2,098 school children were bathed and their clothes disinfected.

This work is carried out at the Oldham Road Depot, and the accommodation or the purpose is as follows:—

One disinfecting room about 12 feet square, containing three baths and a small efficient steam disinfector.

One nurses' room about 10 feet square.

One dressing room about 10 feet square, containing two beds.

Two water-closets.

This block is small, but has proved very serviceable.

Disinfecting Apparatus in the City.

Monsall Hospital.

One of the Manlove and Alliott old type, about 120 cubic feet capacity. It works under 20 lbs. pressure, and has hitherto proved efficient. It was tested in 1906, and a further test now seems desirable.

Baguley Sanatorium.

One of the Goddard, Massey and Warmer type, about 90 cubic feet capacity. It works under 20 lbs. pressure, and is efficient.

Clayton Hospital.

One current steam disinfector of an old pattern. It has been of service in the past, but cannot now be considered adequate.

Oldham Road Depot.

1. One current steam disinfector, built of brick, capacity about 1,400 cubic feet. It is 40 years old, and is now becoming dilapidated and unreliable.

2. One small disinfector of the Manlove and Alliott type, capacity about 9 cubic feet.

3. One formalin chamber, about 240 cubic feet capacity. This chamber is too small for the work required.

4. One makeshift chamber, in which mattresses, etc., with leather fittings are disinfected by chlorine vapour.

Public Health Office.

One large "sack" disinfector. This is a portable apparatus, large enough to take a single mattress, but not a double one. It is too big for transport by bicycle.

Caythorpe Street Cleansing Depot, Moss Side.

One steam disinfector of the Horsfall type, of about 80 cubic feet capacity.

Fairbourne Road Depot, Levenshulme.

One steam disinfector of the Goddard, Massey, and Warmer type, of about 100 cubic feet capacity.

A full description of the steam apparatus at Oldham Road, Caythorpe Stree and Fairbourne Road is filed in the office.

The disinfector at Oldham Road Depot is worn out, and the question o renewal is of some urgency. Those at Caythorpe Street and Fairbourne Roa are too small for any general purpose, but could be made efficient within thei limitations.

City Architect's Estimates.

In 1922 the City Architect estimated the cost of alterations at Oldham Road Depot for the provision of adequate accommodation for the motor vehicles belonging to the Public Health Committee and for the erection of a new disinfecting station at £4,100.

For the construction of a new disinfecting station at Monsall Hospital his estimate at that time was £6,350.

Dr. St. C. McClure.

RE-ORGANISATION OF INSPECTORATE.

Since coming into office the Medical Officer of Health has become convinced that a re-organisation of the work and staffing arrangements of the Sanitary Inspectors is necessary. Very careful and prolonged consideration has been given to this matter and the Medical Officer of Health has been greatly assisted in the conclusions which have been arrived at by conference with Dr. McClure and Mr. Walton, whose knowledge and experience, both of the work and of the individual men has been invaluable.

The principal reasons for change are :—

(1) That the existing districts have in many instances become unmanageable by a single inspector, owing both to the change of work and to alteration in the character of the districts.

(2) That some of the work does not properly belong to a Public Health Department at all, viz., the administration of the Shops Acts.

(3) Some sections of the work at present carried out by Special Inspectors are of a type strictly comparable with the work daily performed by the District Inspectors, and can, without loss of efficiency, be performed by men in the positions of District Inspectors, viz., the work of the Housing Inspectors and of the Shops and Workshops and Lodging House Inspectors.

(4) The arrangement of the work into specialised sections referred to in (3) is also disadvantageous, inasmuch as it leads to duplication of visits dealing with exactly the same cases and multiplication of inspectors visiting the same premises.

(5) Again, arising out of (3), there is an unnecessary multiplication of record keeping in the department.

(6) The transference of these hitherto specialised sections of the work to the District Inspector increases the interest of the work for the District man.

(7) The increase in the number of districts, with a corresponding diminution in the size of the districts (based on population and type of district), permits of this change of duties and at the same time ought to increase the efficiency of the supervision of the district by each inspector. It is particularly felt that there should be instituted in each separate district a sub-division of the district into small sections, each section in turn being the subject of a " Walking Inspection " by the District Inspector, who will thus keep a general supervisory eye over the general (from the health point of view) conditions as to cleanliness and general practices of that section of the population for which he is responsible.

(8) As at present administered there is no provision for organised supervision of the district work of the Inspectorate. Whilst not in any sense implying want of reliance on any or all of the inspectors, the Medical Officer of Health feels that the system should provide such organised control, and that this control can be efficiently provided by the division of the City into two sections, each of which shall be in charge of a Divisional Inspector responsible directly to the Chief Inspector for the supervision of the district inspectorial work in his own half of the City. The function of the Divisional Inspector will not only be that of supervision but even more particularly that of assisting and advising the District Inspectors in their work, so that a uniform standard of efficiency and of amount of work done may be attained.

(9) The whole of the Inspectorate, including the special inspectors, shall be under the general supervision and control of the Chief Sanitary Inspector.

The principal changes in the staffing and work which are advised are as follows :—

(1) *That the whole of the duties (other than those associated with the supervision of sanitary conveniences) administered by the Local Authority under the Shops Acts should be taken out of the Public Health Department.* Most probably the best Department for the carrying out of the requirements of these Acts will be found to be the Police, and by arrangement between the Committees it is likely that the Council will agree to delegate to th Watch Committee those parts of the Shops Acts referred to above in plac of its present delegation to the Public Health Committee.

(2) *That the posts of Housing Inspectors be abolished and the house to house inspection at present done by them be constituted one of the normal daily duties of the District Inspector.*

One advantage of this transfer will be that defects found in the routine house to house examinations will be reported by the District Inspector, who is afterwards responsible in most instances for seeing that the necessary work is carried out. At the present time housing defects are referred from the Housing Inspectors to the Chief Inspector who has to instruct the District Inspectors again to visit the house so that they may know the conditions which have to be remedied and the remedies for which they have themselves to supervise on behalf of the City. The proposed arrangement also should attain the object of routine house to house examination, *i.e.*, the maintenance in proper condition of the housing in the City, without the present unnecessarily cumbrous office work. It is also proposed that the official card records of the housing inspection be each filled in by the District Inspectors directly at the time of the inspection and filed without delay at the office on their return.

(3) *The special posts of Lodging House Inspectors and Workshops Inspectors should be abolished,* inasmuch as the type of work done by these officers is the same as much of that already done by the District Inspectors, and can quite well be carried out by each District Inspector in his own area. The same evils of overlapping in the work, visits, and records, exist here as in the case of the housing work.

(4) At present there are *three Special Inspectors attached directly to the Medical Officer of Health for special investigation work.* These men are of the greatest value, *but the Medical Officer of Health is of opinion that the number might, without loss of efficiency, be reduced to two,* one of these inspectors thus being liberated for a position in the re-organised Inspectorial Staff.

(5) *The great increase in the work of milk supervision makes it essential that the number of special inspectors devoted to this section of the work be increased.* At present there is only one such inspector with a vacancy, *i.e.*, total of two. Those should be increased to three permanent milk inspectors.

It should be observed that the re-organisation proposed does not mean an increase in the number of posts.

At present there are several vacancies in the Inspectorial Staff, viz., two District, one Milk, two Smoke, two Lodging House, and one Housing Inspector.

The following shows the present and proposed arrangement of the inspectorial posts.

Proposed Staff	Present Staff (Full Strength)	Designation
2	—	Divisional Inspectors
1	—	Floating District Inspector
45	35	District Inspectors
3	3	Food and Drugs Inspectors
2	3	Special Investigation (Medical Officer of Health's) Inspectors
1	1	Canal Boats Inspector
3	2	Dairies and Milkshops Inspectors
3	3	Drainage Inspectors
—	8	Shops and Workshops Inspectors
—	4	Housing Inspectors
—	4	Lodging House Inspectors
4	4	Smoke Inspectors
1	1	Senior Smoke Inspector and Technical Advisor
65	68	

The new arrangement thus reduces the total number of posts by three while actually creating four new appointments, viz., two Divisional Inspectors, one additional Dairies and Milkshops Inspector, and one Floating District Inspector.

The need for additional Milk Inspectors has been recognised throughout the past year. At present there is one, in 1922 there were two such special inspectors, so that there is one vacancy to fill and one new appointment recommended, making a total of three. The work at present done by the District Inspectors in the supervision of milkshops would be done away with. This is necessary, inasmuch as recent legislation requires special knowledge of milk apparatus (pasteurization, filtration, cooling, etc.), and definite training in the standards required in connection with the milk supply. The great increase of work arising out of the recently established control of milkshops makes it necessary to have this special staff. Their duties would also include the supervision of the hygienic conditions of the cows and cowsheds in the City and the manufacture of ice cream.

There are also vacancies in the general inspectorate and in the smoke inspectorate, the filling of which has been deferred pending re-organisation.

RECOMMENDATIONS.

Should the Committee approve of this scheme of re-organisation it is recommended that:—

(1) The Committee should invite applications from the inspectorial staff for the positions of two Divisional Inspectors—these appointments to be made by the Nuisance Sub-Committee.

(2) That the Committee should advertise in the public press for two Smoke Inspectors to fill vacancies existing on that staff—these appointments to be made by the Nuisance Sub-Committee.

(3) That the Committee should appoint a Special Sub-Committee which shall have power to give effect to the other changes in the staff consequent upon the re-organisation.

The Medical Officer of Health begs to report that in connection with the re-organisation of the work of the Sanitary Inspectorial Staff, Mr. Williamson, Superintendent of the Cleansing Department, has given an assurance that the disinfectors whose services will be dispensed with can be absorbed in the permanent Cleansing Staff, insofar as these disinfectors are permanently employed. The same assurance cannot be given for those who are occasional or casual employees. Unfortunately however, the Shop Hours Act work, which it was hoped the Police would take over will have to remain as a part of the duties of the Sanitary Inspectors, inasmuch as the Home Office will not agree to these duties being carried out by the Police. Subject to the approval of the Committee the Medical Officer of Health proposes to put into operation the re-organisation scheme which has already been approved by the Committee distributing the shops work amongst the District Inspectors.

PROGRESS REPORT ON CANCER.

In order to save the time of the Committee and to provide each member with a statement as to the work of the Committee, the decisions of the various Sub-Committees are summarised in this report to show briefly the work that has already been done and the work to be undertaken in the immediate future.

Experimental Research.

The main line of experimental research to be undertaken by this Committee at present is in connection with the origin and prevention of mule spinners' cancer—a form of the disease that is closely associated with the Lancashire cotton industry.

This work will be carried out at the University by Dr. C. C. Twort, who has been appointed to the position of Pathologist to this Committee. He will work in close association with the various specialists on the Committee, and will be assisted by a full-time chemist, Dr. Ing, Ph.D., Oxon., who has carried out special research on oils.

Dr. Twort commenced duty in May last, and up till now has been engaged upon equipping his laboratory. He has now completed this, and the actual research work will be commenced immediately. A laboratory assistant has been appointed to assist Dr. Twort.

Statistical Research, After Care, Follow Up, and Treatment of Cancer Cases.

Two full-time investigators, Dr. Gretta Mary Wardle and Dr. John Murray, who have had special experience in work of this description, have been appointed to conduct the following work :—

(1) Ministry of Health's enquiry into the results of treatment in case of cancer of the breast for the years 1910–13 and 1919–21. These tw periods have been selected by the Ministry of Health for this enquiry so that reliable and comparable figures may be obtained from differen parts of the country.

(2) The establishment of a regular and complete system of record keeping in all current cancer cases in the City.

(3) The collection of specimens from cancer cases in hospitals and in private practice, for submission to the histologist for research purposes, included in which will be the consideration of the efficiency of the treatment afforded to the different types of cancerous growths.

(4) The continuous supervision of each case of cancer occurring in or treated in the City, so that any recurrence of the growth or intermediate condition associated with the cancer may be recognised at the earliest possible date, and the patient referred immediately to the private medical practitioner with a view to suitable treatment being provided without delay.

The two Special Investigation Officers are at present solely engaged upon the first of these fields of enquiry. (1) They have worked through the records of the Manchester Royal Infirmary and the Christie Hospital, and have investigated 687 cases. They are now following up these cases in the homes of the patients, and noting the results obtained by the treatment afforded in each case. This work will be finished within the next three months, and they will then begin the work described in paragraphs (2), (3), and (4).

HISTOLOGICAL RESEARCH.

Dr. C. Powell White has been appointed part-time histologist to undertake the histological examination of specimens from each case of cancer coming to our knowledge. This work is essential to the proper diagnosis of the disease, and is an essential part of adequate and successful treatment, because by the correlation of the knowledge obtained by the work outlined in paragraphs (2) and (3) with the type of treatment adopted in each case, our knowledge of the best kinds of treatment for the different types of cancer will be improved. This should result in an increased efficiency of the provision for cancer treatment in the City.

PROPAGANDA.

A Special Propaganda Sub-Committee has been appointed to take action, with a view to informing the public adequately on the subject of cancer, its incidence, and treatment.

The Public Health Committee of the City has definitely delegated its statutory duties with regard to public education in health to this Committee in so far as cancer is concerned, and the Manchester Insurance Committee has sent a subscription to the funds for this specific purpose.

(a) Post-graduate Course on Cancer for Medical Practitioners.

As part of a scheme of public education in regard to cancer, arrangements have been made for a series of 12 lectures to be given by medical men on the various aspects of the cancer problem. These lectures are being given as part of a post-graduate course for medical men and women in association with the Manchester Royal Infirmary and the University of Manchester. The first eight will be given at the Manchester Royal Infirmary, and the remaining four will be given in the Lord Mayor's Parlour.

The course of lectures is as follows :—

POST-GRADUATE COURSE.

Friday Afternoons at the Manchester Royal Infirmary.

1926.		
1st October ...	" General Survey of Cancer Incidence "	R. Veitch Clark, M.A., M.B., Ch.B., B.Sc., D.P.H., Medical Officer of Health, Manchester.
8th October ...	" Modern Views as to the Cause of Cancer "	C. Powell White, M.A., M.D., F.R.C.S., Cancer Research Pathologist, University of Manchester.
15th October ...	" Lymphatic System in relation to Cancer "	J. Kay Jamieson, M.B., C.M., Professor of Anatomy, University of Leeds.
22nd October ...	" Mammary Cancer "... ...	Wilson H. Hey, F.R.C.S., Hon. Assistant Surgeon, Manchester Royal Infirmary.
29th October ...	" Uterine Cancer "	Archibald Donald, M.A., M.D., C.M., Consulting Honorary Surgeon, St. Mary's Hospital, Manchester.
5th November ...	" Cancer of the Skin " ...	R. B. Wild, M.Sc., M.D., F.R.C.P., Professor of Materia Medica and Therapeutics, University of Manchester.
12th November...	" Oral Cancer "	J. F. Dobson, M.S., M.B., F.R.C.S., Hon. Surgeon, General Infirmary, Leeds.
19th November...	" Cancer of the Gastro-intestinal Tract "	A. H. Burgess, M.B., Ch.B., M.Sc., F.R.C.S., Honorary Surgeon, Manchester Royal Infirmary.

Tuesday Evenings in the Lord Mayor's Parlour, Town Hall, Manchester.

1927.

18th January ...	" Genito-urinary Cancer "...	J. B. Macalpine, M.B., Ch.B., F.R.C.S., Honorary Surgeon and Surgeon-in-Charge of the Genito-urinary Department, Salford Royal Hospital.
25th January ...	" Mule Spinners' Cancer " Symposium.	Speakers :—S. A. Henry, M.A., M.D., H.M. Medical Inspector of Factories. A. H. Southam, M.A., M.D., F.R.C.S., Assistant Surgical Officer, Manchester Royal Infirmary. C. C. Twort, M.D., Pathologist to the Manchester Committee on Cancer. S. R. Wilson, F.R.C.S., Lecturer on Applied Physiology, University of Manchester.
1st February ...	" X-rays and Cancer Diagnosis "	J. M. W. Morison, M.D., C.M., Radiologist, Royal Infirmary, Edinburgh.
8th February ...	" Radiology and Radium in the Treatment of Cancer "	A. Burrows, M.D., Radiologist, Manchester and District Radium Institute.

The Committee has endeavoured to choose lecturers who are specially interested in the particular subject upon which they have been invited to lecture, and at the conclusion of the course it is hoped to produce a booklet, containing the lectures that have been given, for circulation to the local medical practitioners.

(*b*) *Leaflets* on the subject of cancer, for distribution to the general public, are in course of preparation.

(*c*) The question of *Public Lectures* on the subject is at present under consideration.

REGIONAL SMOKE ABATEMENT COMMITTEE.

At the end of 1924 this Committee formed an Executive Committee with the following terms of reference :—

> To consider and submit afterwards to the Joint Committee proposals which shall have for their object the purification of the atmosphere in the areas represented, and for this purpose to include in their considerations the possibility of effecting a standardisation of procedure of the observations of smoke emission ; of the permissible smoke emission periods ; of action taken by the local Health Authority ; and of the type of case in which legal proceedings should be taken. Further, that the Committee be requested to consider the existing facilities for efficient observation of smoke emission and, as a corollary, the need or possibility of joint action being taken by various Authorities, and, in such an event the form which such joint action would assume.
>
> Also to consider the problem of dealing with domestic smoke an educational propaganda suitable for the general public, manufacturers and boiler attendants.

The Executive Committee held a large number of meetings and submitted a report to the Regional Smoke Abatement Committee at a meeting held on the 29th of June, 1925.

The following are the principal items of the Executive Committee's recommendations :—

1. *Methods of Inspection.*

(*a*) *Patrol System.*—In the patrol system the inspector has no regula round or series of rounds for the taking of observations. He is left a fairly free hand as to how he proceeds. The observations of chimneys taken by him depend upon the type of work in that district, and he very soon learns which parts require most supervision. One great advantage i that his presence is not known to anyone at any given time, and this lead to greater care in the control of firing plant. Visits should include early morning and late evening observations in the summer weather.

The replies to a questionnaire sent out to the regional authorities show that two thirds of the authorities adopt this method.

Also the results obtained indicate that this system is the best system of inspection in vogue, although the total number of recorded observation is relatively few, inasmuch as the inspector concentrates upon offendin chimneys instead of making observations upon all chimneys whethe smoking or not.

(*b*) *Systematic.*—In this method the inspector—having divided his district into sections—systematically goes round the sections taking observations and completing the circuit within a given time. He takes observations of all the chimneys, whether offending or not.

In this way the inspector has a large amount of work done to show in the number of observations, but the results show that less effective work is done.

Resolved.—That the patrol system be adopted in all cases where it can be applied effectively.

2. *Standard definition of black smoke in such quantity as to be a nuisance.*

Black smoke of such density that light cannot be seen through it as it issues from the chimney top.

So far as possible the line of vision of the observer should be at right angles to the direction in which the smoke is travelling.

The distance of the observer from the chimney will depend upon the local circumstances and visibility at the time of observation, and no hard and fast rule can be laid down. Under normal circumstances from 100 to 500 yards may be taken as the best distance.

The use of the Ringelmann Chart is hardly practicable in the patrol system of inspection, unless in special cases where its employment would be of value as giving additional evidence for the purposes of prosecution.

Resolved.—That the above definition be accepted.

3. *Time concession.*

The second paragraph of sub-section 7, section 91 of the Public Health Act, 1875, entirely prohibits nuisance from black smoke, and the Courts have held that under this section there is no defence possible on the lines of the "best practicable means" clause. There are exceptions, however, provided for in section 334, where certain trade processes are enumerated, but these it is not necessary at present to refer to.

The Departmental Committee on Smoke and Noxious Vapours Abatement declared after due consideration that "little or no smoke need be produced by boiler furnaces." This is true, but under present conditions, both of practice and knowledge of fuel consumption, it is necessary that in practical working we admit the need of a concession or time limit for the emission of black smoke from a works chimney. It is very inadvisable to use the words "standard emission period," inasmuch as with proper conditions, there need be no emission at all. "Concession" is the correct description.

From the replies to the questionnaire this concession varies from two minutes in the half hour to 10 or 12 minutes in the hour, and the practice varies so much that no useful summary could be made of the time limit of the concession.

It is obvious that this Committee should direct its consideration to the shortest concession period which has proved to be successful in its practical application. This concession period is an aggregate of under two minutes in the half hour, which has for over 30 years been adopted as the line of guidance in smoke control in the City of Manchester. Emission for two minutes is considered to be justification for prosecution. This practice has reduced the manufacturing smoke in the City, both from boilers and from chemical, metallurgical, and other furnaces, to a small fraction of what it was 25 years ago. There is every reason, therefore, for urging that this should be the maximum concessionto be recommended for adoption throughout the joint area by this Executive Committee.

The emission of smoke is timed to bursts of 30 seconds, *i.e.*, emissions lasting more than 30 seconds are added together, and if in the aggregate two minutes of such emissions are found in any half hour, the case is reported with a view to legal proceedings being taken. If the record of the firm is a good one, and the offence is not extreme, a cautionary letter in the first instance is frequently effective without Court proceedings being instituted.

The experience of Manchester has been that there is no need for varying the concession according to the number of boilers.

Should any case arise in which the black smoke emissions are so timed as just to keep the firm outside the limits of concession already mentioned, such a case has to be dealt with as a particular issue, special observations being taken and special report made to the Local Authority with a view to suitable action being taken.

Resolved.—That the recommendations contained in the report be approved and adopted with the following emendation, that instead of the words—

> "The emission of smoke is timed to bursts of 30 seconds" it shall read
>
> "The emission of smoke is timed to bursts of 15 seconds."

4. *Suggested qualifications of Smoke Inspectors.*

(1) Recognised qualification as sanitary inspector.

(2) Practical engineering experience of boilers and firing.

(3) Previous boiler experience.

(4) A good general education.

5. *Formation of United District.*

For the suppression of offensive manufacturing smoke constant observation of chimneys is necessary. Even when something like control is obtained, the presence of the inspector on the district is necessary to prevent lapse.

For this reason inspectors whose whole time is devoted to smoke work are necessary in all industrial areas. The sanitary inspector cannot, from the oft-times urgent and tieing nature of his other duties, deal with smoke nuisance in the effective manner which the importance of this work renders necessary.

The great difficulty is that the country is split up into so many small units, and only a few of these can employ whole-time inspectors for smoke work.

In a large industrial area such as that represented by this Regional Committee some way of grouping the various authorities is necessary for the effective control of the smoke nuisance.

It appears that by section 279 of the Public Health Act, 1875, the Ministry of Health has power to declare any group of districts a united district for the purposes of smoke abatement, and sections 280 to 284 deal with the constitution, powers, and finance of such United Districts.

This is probably the only way in which uniformity of administration and practice could be insured.

The United District Committee would group the various districts into sub-districts and decide the number of inspectors to be employed. Probably the actual work for each sub-district would be carried out by a sub-committee for that district.

The United District Committee, of necessity, would be in supreme control of the work, and the sub-district committees would be required to make regular reports to the main committee of the work done and the action taken in their areas.

The United District Committee would have an inspector to supervise and advise the sub-district inspectors.

Judging from Manchester's experience one inspector can deal effectively with about 250 chimneys. Of course, the area has to be taken into account, but this may be taken as a basis for grouping.

On the basis of replies received from the regional authorities it would appear that a reasonable estimate of the number of chimneys in the area is approximately 5,000. On the basis, therefore, of 250 to an inspector this would mean 20 sub-district inspectors.

Resolved.—That this Executive Committee do approve in principle of the establishment of a United District.

The Executive Committee gave careful consideration to the type of districts included in the regional area, and recommended the elimination from regional action of certain districts which, either from the type of district or from their geographical situation, could not reasonably be included in a general scheme.

6. *Suggestions re Scheme and Grouping of Authorities.*

The Executive Committee submitted the following proposals as a basis of discussion with a view to the formation of a United District for the control of smoke nuisance :—

(1) That the Ministry of Health be asked to make an Order forming a Joint District.

(2) That the local authorities forming the regional area be grouped together in inspectorial districts so far as possible, those districts which have common interests being joined together in "family groups" on the basis of 200-250 chimneys per inspectorial district.

(3) That each inspectorial district be governed by a committee elected from the Health Committee of each district in the group.

(4) That each Inspectorial District Committee elect two of its members to form the Regional Council.

(5) That the function of the Inspectorial District Committee be to carry out the policy decided upon by the Regional Council, and that full powers be delegated to it by the Regional Council to carry out the provisions of the Act in its area—the district committee to report regularly to the Council

(6) That the Regional Committee formulate the policy, have supervision over, and act in an advisory capacity to the District Inspectorial Committees. (The number of chimneys being between 4,600 and 5,000, some 20 inspectorial districts would be formed, consisting of an average of five authorities to each.) A plan of the suggested grouping of the districts was submitted.

7. *Domestic Smoke.*

Resolved.—That the Regional Committee be informed that this Executive Committee have considered the domestic smoke problem that there are certain aspects of it which promise at least a partial solution of the difficulty, but that they are not prepared at this stage to make any definite recommendation.

Resolved.—That the Regional Committee be recommended to refe this matter back to the Executive Committee for report at a future date

At the meeting of the full Regional Committee the following resolutions were passed on the recommendations of the Executive Committee:—

Recommendations Nos. 1 and 2 relating to methods of inspection and standard definition of black smoke were approved.

Recommendation No. 3 re Time Concession.

The Regional Committee passed an amendment that the time concession should be 30 seconds instead of 15.

Recommendation number 4.

It was felt that the recommended qualifications for smoke inspectors might meet with difficulty in obtaining men for the posts, and this was referred back to the Executive Committee for further consideration and report.

Recommendation number 5—*Formation of a United District.*

The following resolution was passed with five dissentients:—

> "That this conference of representatives of local authorities within the Irwell and Mersey watershed recommends their various constituent authorities to adopt the policy contained in the report, and to agree to an application being made to the Ministry of Health for an Order forming a United District for the purpose of administering the smoke clauses of the Public Health Act."

It was further resolved that a record of the proceedings should be officially sent to the various regional authorities with an explanatory letter and an estimated cost of the whole scheme.

A subsequent meeting of the Executive Committee was held and an estimated ost for the whole scheme of £12,000 for the first year's working of the scheme as approved. This resolution was forwarded to each of the constituent uthorities, with the contribution likely to be required of such authorities when he rateable value was known to the Committee to enable this to be done.

It was found that no further meeting of the Committee could be held uring 1925.

HOUSING REQUIREMENTS IN THE CITY.

REPORT OF THE MEDICAL OFFICER OF HEALTH.

In this report an estimate is made of the number of houses required in Manchester at the present time, June, 1925, (1) to meet the normal growth of population ; (2) to abate overcrowding ; (3) to replace houses unfit for habitation. *It does not include houses required to replace other houses which, although they cannot at present be regarded as unfit for human habitation, fall definitely below a reasonable standard. It is estimated that, to meet this demand alone,* 26,000 *houses would be required.*

Normal Growth of Population.

From 1910 to 1914 the population of Manchester increased from 716,137 (estimated) to 739,136 (estimated), an increase of 22,999.

The number of new houses built during this period, 1910 to 1914, was 4,790 (Improvements Department). At the rate of 4·6 persons per house (Census factor) this number of houses would accommodate 22,034 persons. These figures show that in 1914, making no allowance for buildings demolished or converted into business premises, for empty houses, for dwellings closed, for houses unfit for habitation, or for existing overcrowding, the erection of houses was at that time insufficient for the growing needs of the City.

During the years 1915 to 1919 building practically ceased, the total number of dwelling-houses erected in Manchester during these five years being 212.

The estimated population in the middle of 1911 (Census year) was 716,734, and in the middle of the year 1924 it was estimated at 755,161, showing an increase of 38,427 and an average annual increase of 2,956.

Assuming that this rate of increase was maintained during the 10 years 1915 to 1924, at the middle of the latter year 29,560 would be added to the population.

From 1st November, 1915, to October 31st, 1924, 5,507 houses were built, 14 of which were for persons dehoused in an unhealthy area. 5,493 at 4·6 persons per house (Census factor, 1912) would accommodate 25,267 persons showing a shortage of approximately 900 houses.

It is clear, therefore, that building during the last few years has not kep pace with the demands of the natural increase in the population.

Overcrowding.

Housing requirements depend largely upon the extent of overcrowding i existing dwellings.

Overcrowding may be estimated according to three standards—

(1) Registrar-General's standard—houses with more than 2 persons per room.

(2) Manchester standard—houses with more than 2½ persons per bedroom; 2 children under 10 years being counted as one person.

(3) Dr. Veitch Clark's standard of social overcrowding—*i.e.*, conditions in houses which prevent the proper separation of sexes for sleeping purposes.

There was in 1911, as recorded in the Census returns, a considerable amount overcrowding, and this has become aggravated, especially since 1919.

According to the Census, 1921, the number of 1 to 4 roomed tenements in e City with more than 2 occupants per room was 6,683, and the number of cupants of such tenements was 51,038, which represents 13 per cent. of the pulation of private families occupying 1 to 4 roomed tenements, and over per cent. of the entire population of all private families in the City

The total number of private families occupying 1 to 4 roomed tenements at e time of the 1921 Census was 97,370, and the total number of occupants as 395,992. The average family, therefore, consisted of 4·1 persons.

Applying this factor, 4·1, to the number occupying overcrowded tenements, z., 51,038, it shows that some 12,000 families were living under overcrowded nditions.

her Evidence of Overcrowding.

The standard of overcrowding which has been adopted by the Public Health mmittee of the Manchester Corporation is "Houses with more than 2½ rsons per bedroom." In this calculation two children under 10 years of age e counted as one person.

ouse to House Inspection.

In 1921, 7,445 houses with 1 to 4 rooms were inspected, and the number ith more than 2½ persons per bedroom was 1,877, or about 25 per cent.

In 1922, 5,612 1 to 4 roomed houses were inspected, and the number with ore than 2½ persons per bedroom was 1,449, or about 26 per cent.

It is an acceptable deduction, therefore, that about one-fourth of the to 4 roomed houses in Manchester are overcrowded according to this andard.

The number of 1 to 4 roomed houses in the City is not given in the Census turns, and must be estimated.

The number of 1 to 3 roomed undivided houses at the Census, 1921, was 14,536, and the number of 4 to 5 roomed houses was 96,490.

The house-to-house inspection records of 12,972 houses in 1921 give th proportion of 4-roomed houses to 5 roomed houses as 1·7 to 1.

In 1922, 11,823 houses were inspected and the proportion was 1·3 to 1.

In an analysis of infectious disease records relating to 1,436 houses in 192 the proportion was 2 to 1.

If the proportion be taken as 1·5 to 1, which is a reasonable assumption and the Census number of 4 to 5 roomed houses be taken, viz., 96,490, the the estimated number of 4 roomed houses was at that time about 64,000. One-fourth, or 16,000, are overcrowded, which represents a population o 16,000 × 4·6, or 73,600, and, taking the factor 4·1 persons per family (Censu number per family in 1 to 4 roomed tenements), about 18,000 families.

Thus, according to the standard of the Public Health Committee, 18,00 families are living in overcrowded conditions.

Analysis of Infectious Disease Records, 1923 :—

The analysis relates to 1,436 houses.

18	2	roomed	houses.
106	3	,,	,,
627	4	,,	,,
311	5	,,	,,
226	6	,,	,,
74	7	,,	,,
74	over 7.		

According to standard (1), 88, or 6·1 per cent., were overcrowded.

According to standard (2), 281, or 19·6 per cent., were overcrowded.

According to standard (3), 296, or 20·6 per cent., were overcrowded.

The data also afford information as to the number of families living in ov crowded conditions—

Standard	No. of Families	No. Overcrowded	Percentage
1	2,033	138	7·0
2	2,033	404	20·0
3	2,033	487	24·0

The total number of private families in the City at the time of the Census, 1921, was 163,939. Applying the percentages of overcrowded families obtained n this manner, the number of families in Manchester living under overcrowded conditions was as follows:—

Under	Standard	1	11,000
,,	,,	2	33,000
,,	,,	3	39,000

Although a fair proportion of all types of houses was included in this nvestigation, yet it may be that the limited number of houses involved, and he fact that only houses invaded by infectious disease were included, ives an exaggerated estimate of overcrowding generally. Comparison with he house-to-house inspection records indicates that a larger proportion of to 5 roomed houses were included than is general throughout the City. The gures were, as already stated, 1·7 to 1 and 1·3 to 1 compared with 2 to 1 in he infectious disease records.

Reduce the number of families accordingly by one-fourth, and we get the ollowing measure of overcrowding:—

Under	Standard	1	8,000	families.
,,	,,	2	25,000	,,
,,	,,	3	29,000	,,

onclusions on Overcrowding.

By these several methods of estimation it is concluded that, under the egistrar-General's standard, from 8,000 to 12,000 families in Manchester e overcrowded. Under the Public Health Committee's standard the estimated umber of families overcrowded lies between 18,000 and 25,000. Under eitch Clark's standard of social overcrowding the number is still greater, amely, about 29,000 families.

The figure of 20,000 families may be put forward as a conservative estimate these conditions.

The records of houses invaded by infectious disease show that 48 per cent. the houses investigated were occupied by more than one family. Reports district inspectors indicate that in cases of overcrowding discovered by em, 70 per cent. of the houses are occupied by more than one family.

It is likely that of the 20,000 overcrowded families a similar proportion are ercrowded by the existence of more than one family in the house.

Consequently, if 40 per cent. of the number of overcrowded families be taken, z., 8,000, and, say, one-fourth of the remainder, viz., 3,000, it gives a figure 11,000, which is in my belief a justifiable estimate of the number of houses quired at the present time to remedy the existing evils of overcrowding Manchester.

Unhealthy Areas.

Three areas are now scheduled as unhealthy areas, and have been represented as such—

(1) Gorton area—Houses old and dilapidated.

(2) Deansgate area—Houses dark and in disrepair.

(3) Medlock Street area—Houses dark, damp, and dilapidated.

The number of houses included in these areas is 323, 87, and 1,033 respectively, a total of 1,463, less 199 already in course of demolition, and the population involved is 1,668 + 576 + 454, a total of 6,758, less 862 already being rehoused.

There are other areas in the City which require to be dealt with in a similar manner, but, apart from such, 1,264 houses are required before progress can be made with the demolition of houses in represented areas.

DWELLINGS UNFIT FOR HABITATION.

Out of 48,212 houses sampled by house-to-house inspection during the pas five years outside represented areas, 25,020 were found to be in a seriousl defective condition. Of this total, 13,344 are recorded as being remediabl without reconstruction, 5,550 as irremediable without reconstruction, an 6,126 as being incapable of being remedied at all. The total number o dwelling-houses in the City is about 160,000. Those included in the house to-house inspection are amongst the worst, and a reasonable but low estimat of the number of houses required to replace those which are unfit and whic cannot be made fit for human habitation is 8,000.

OTHER EVIDENCE OF HOUSE SHORTAGE.

Marriage Rate.

It is practically impossible to-day for a newly-married couple to get a separat house. The marriage rates during the years 1920 to 1924 have varied betwee 14·5 and 21·4 per 1,000 of the population. In 1924 the rate was 16·5, whic means that about 12,500 people were married in Manchester in that year.

Applications for Corporation Houses.

On August 10th, 1923, the registration lists were thrown open after a week advertisement and 5,054 applications were received within three days, at t end of which time the lists were closed. 4,417 applicants, of whom 497 resid outside the City boundary, completed and returned forms sent to them. T number of applicants who complained of overcrowding was 1,420, or abo 32 per cent. A great proportion of those who applied were young marri couples, either without a family or with a small family. The inability of the newly-married couples to obtain houses is one of the factors responsible for t production of social overcrowding.

ESTIMATE OF THE TOTAL NUMBER OF NEW HOUSES REQUIRED IN MANCHESTER AT THE END OF 1926.

A.—To meet the normal growth of population.

B.—To abate overcrowding.

C.—To meet the demolition of houses in represented areas.

D.—To replace dwellings incapable of being made fit for habitation.

The figure for A is 2,000; for B, 11,000; for C, 1,244; for D, 8,000. The requirements under C and D overlap those under B. It is estimated that 25 per cent. of all 1 to 4 roomed houses in the City are overcrowded, and it is probable that overcrowding is more prevalent in the type of house included in C and D. Assuming that one-half of the houses which are to be demolished and one-half of the dwellings unfit for habitation and which cannot be made fit are overcrowded, and that the needs of these proportions have been dealt with under the heading of "overcrowding," the remainder, viz., 622 and 4,000 respectively, must be replaced by an equal number of new houses.

On this basis the estimate of the number of new houses required by the end of 1926 is, therefore, as follows:—

Under A	2,000	houses.
,, B	11,000	,,
,, C	622	,,
,, D	4,000	,,
Total	17,622	houses.

R. VEITCH CLARK,
Medical Officer of Health.

Civic Buildings, Manchester,
July, 1925.

STATISTICS OF OVERCROWDING.

The following facts were obtained from the Infectious Disease Enquiry Sheets for the first ten months of 1923. 1,436 cases have been examined, each representing one house. They contained 8,191 individuals, or an average of 5·7 per house:—

Of the 1,436 houses—

973	were occupied by	one	family,	or equal to	67·7	per cent.
370	,, ,,	two	families,	,,	25·7	,,
70	,, ,,	three	,,	,,	4·9	,,
12	,, ,,	four	,,	,,	0·8	,,
8	,, ,,	five	,,	,,	0·6	,,
2	,, ,,	seven	,,	,,	0·1	,,
1	was occupied by	eight	,,	,,	0·1	,,

OVERCROWDING.

Of the 1,436 houses –

88 were overcrowded on the Registrar-General's basis of 2 individuals per room, or 6·1 per cent.

281 were overcrowded on the Manchester standard of 2½ persons per bedroom, or 19·6 per cent.

296 were overcrowded socially (sleeping accommodation insufficient for adequate separation of sexes), or 20·6 per cent.

STATEMENT SHOWING CLASS OF HOUSE INVESTIGATED, WITH NUMBERS OF OCCUPANTS PER ROOM AND BEDROOM.

	Individuals per Room	Persons per Bedroom
Of the 1,436 Houses—		
18—2 roomed Houses had 18 Bedrooms ...	2·1	4·1
106—3 ,, ,, 211 ,, ...	1·8	2·7
627—4 ,, ,, 1,268 ,, ...	1·4	2·8
311—5 ,, ,, 944 ,, ...	1·1	1·9
226—6 ,, ,, 702 ,, ...	0·9	1·8
74—7 ,, ,, 297 ,, ...	0·9	1·6
74—over 7 ,, ,, 425 ,, ...	Not ascertainable	1·6

It appears from these figures that overcrowding ceases where the number of bedrooms in a house exceeds two, and, broadly speaking, this is the case; but this does not exclude the occurrence of overcrowding in larger houses where, although the total number of persons in the house is such that divided over all the bedrooms the number of individuals is less than 2·5 per bedroom, yet owing to unequal sharing of the accommodation overcrowding does in fact exist.

A detailed statement showing the overcrowded houses in their respective classes is attached hereto.

Note.—The word ' persons " is used to denote both adults and children—two children under 10 years of age are reckoned as one adult.

TABLE SHOWING HOUSES OVERCROWDED.

REGISTRAR GENERAL'S FACTOR—OVER TWO INDIVIDUALS PER ROOM.

	1 Family		2 Families		3 Families		4 Families		5 Families		6 Families		7 Families		8 Families	
No. of Rooms	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	18	38·9	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	80	20·0	25	24·0	1	...	...	...	...	...	...	...	...	...	...	...
4	449	6·5	163	12·8	14	21·4	1	...	...	...	...	...	...	...	...	...
5	203	0·9	89	1·1	16	...	2	...	1	...	...	...	...	...	...	...
6	145	...	57	...	18	...	3	...	3	33·3	...	...	...	...	...	...
7	41	...	21	...	6	...	4	...	2	...	...	...	...	...	...	...
Over 7	37	...	15	...	15	...	2	...	2	...	...	...	2	100·0	1	...
TOTALS ...	973	5·5	370	7·6	70	4·8	12	...	8	12·5	...	...	2	100·0	1	...

TABLE SHOWING HOUSES OVERCROWDED.

MANCHESTER STANDARD—OVER 2½ PERSONS PER BEDROOM.

(Two children under 10 years being counted as ONE person).

	1 Family		2 Families		3 Families		4 Families		5 Families		6 Families		7 Families		8 Families	
No. of Rooms	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	18	61·1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	80	27·5	25	40·0	1	...	...	...	...	...	...	...	...	...	...	...
4	449	24·5	163	46·6	14	78·6	1	100·0	...	...	...	...	...	...	...	...
5	203	7·9	89	5·6	16	12·5	2	50·0	1	...	...	...	...	...	...	...
6	145	2·7	57	7·0	18	5·5	3	...	3	66·6	...	...	...	...	...	...
7	41	...	21	...	6	16·6	4	25·0	2	...	...	...	...	...	...	...
Over 7	37	...	15	...	15	...	2	...	2	...	...	...	...	100·0	1	100·0
TOTALS ...	973	16·7	370	25·7	70	21·4	12	25·0	8	25·0	...	...	2	100·0	1	100·0

TABLE SHOWING HOUSES OVERCROWDED.

STANDARD OF CLASSIFICATION :—SOCIALLY OVERCROWDED.

(Sleeping accommodation insufficient for adequate separation of sexes.)

	1 Family		2 Families		3 Families		4 Families		5 Families		6 Families		7 Families		8 Families	
No. of Rooms	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded	No. of Houses	% Over-crowded
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	18	33·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	80	28·7	25	52·0	1	100·0	...	...	...	...	...	...	...	...	...	...
4	449	18·7	163	54·6	14	92·9	1	100·0	...	...	...	...	...	...	...	...
5	203	10·4	89	13·5	16	18·8	2	50·0	1	...	...	...	...	...	...	...
6	145	7·6	57	12·3	18	16·6	3	...	3	66·6	...	...	...	...	...	...
7	41	...	21	...	6	50·0	4	50·0	2	...	...	...	...	...	...	...
Over 7	37	...	15	...	15	...	2	...	2	...	...	...	2	50·0	1	100·0
TOTALS ...	973	14·9	370	32·6	70	32·8	12	33·3	8	25·0	...	...	2	50·0	1	100·0

TABLE II.—COMPILED FROM DATA OBTAINED FROM HOUSE-TO-HOUSE INSPECTION REPORTS IN 1921 AND 1922, SHOWING (1) NUMBER OF HOUSES WITH MORE THAN two PERSONS PER ROOM, AND (2) NUMBER OF HOUSES WITH MORE THAN 2½ PERSONS PER BEDROOM. (In this table two children under 10 years of age are reckoned as one person.)

No. of Rooms	No. of Houses inspected, 1921	Percentage with more than two persons per Room	Percentage with more than 2½ persons per Bedroom	No. of Houses inspected, 1922	Percentage with more than two persons per Room	Percentage with more than 2½ persons per Bedroom
1	2	...	...	19	...	...
2	406	25·0	25·0	242	37·5	62·5
3	1,902	6·5	19·7	1,065	9·5	18·9
4	5,135	2·1	27·3	4,286	1·9	25·6
5	3,041	0·7	8·5	3,319	0·5	7·5
6	1,478	...	8·9	1,715	...	7·2
7	564	...	3·2	725	...	3·7
Over 7	444	...	1·1	452	1·8	2·4

HOUSING ACTS.

TOTAL NUMBER OF HOUSES INSPECTED FROM OCTOBER, 1919, TO DECEMBER, 1924—48,212.

Serious Defects		Unfit—Cannot be Remedied
Remediable without Reconstruction	Irremediable without Reconstruction	
13,344	5,550	6,126

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